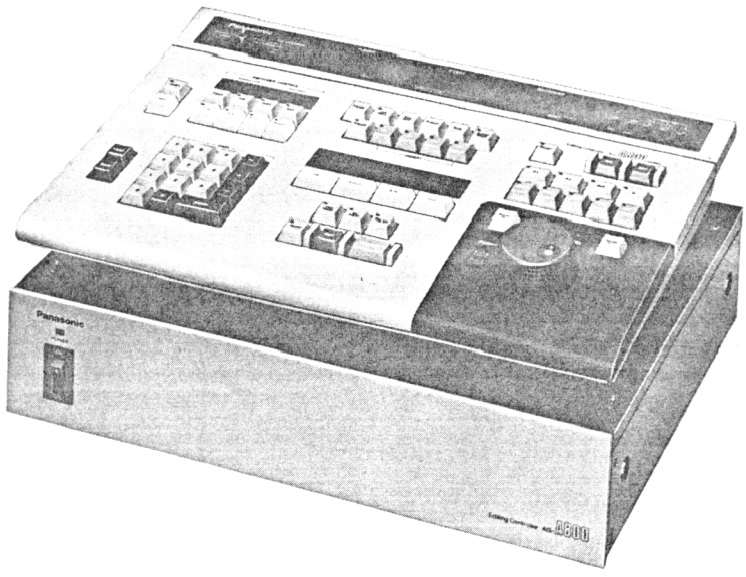
Editing Controller

AG-A800



SPECIFICATIONS

ITEM	SPECIFICATIONS
Power	Source: AC 220~240 V, 50~60 Hz Consumption: Approx. 36 W (When inserting the Interface Board)
Controls	Source: Unit/Editor-Unit: Record, Fast Forward, Play, Rewind, Stop, Search (SHUTTLE, JOG) EDIT READY
Editing Controls	Editing Modes: Assemble, Insert (Audio CH1, CH2/Video/Time Code) Audio Split, A/B Roll.
	Edit Point Trimming: Mark In/Out/Trim−/Trim+/~Key/Clear/10 Key/Edit Point (IN/A OUT/B IN/OUT) [source-unit/editor-unit]
	Editing Controls: Preview, Auto, Edit, Edit Stop, Review Go-To, TCG Set, EVENT, Duration Total.
Switcher Controls	Source-Unit: Auto/Transition/Dissolve/Wipe/Key Take/Position/Audio
Counter Display	Time/Lap Indication: Max. ±9 hr. 59 min. 59 sec. 24 fr. (When Control Signal) Max. ±23 hr. 59 min. 59 sec. 24 fr. (When Time Code)
Connectors	Remote Control: 25-pin Data IN/OUT Connectors
	Additional Source: 15-pin AUX CONTROL Connector (Relay Contact)
	Reference Video IN/OUT Connectors (BNC) Loop through with 75 ohms
	Switcher Control: 9-pin SW I/F Connector
	To Key Board Connector : 15-pin To I/F Unit Connector: 15-pin

ITEM	SPECIFICATIONS
Compatible VTR Units	AG-7500, AG-7510, AG-6500, AU-650B AU-640, AU-630, AU-620, NV-9600, NV-9240
Connection Capability (number of units)	Up to 2 Source Unit 1 Editor Unit
Automatic Editing Capability (number of Edits)	128 Individual data items
Preroll Time	3, 5, 7, 10, 15 sec (selectable)
Operating Temperature	41°F~104°F (5°C~40°C)
Operating Humidity	35%~80%
Dimensions	I/F Unit; 16 11/16" (W)×3 13/16" (H)×11 13/16" (D) 424 (W)×96 (H)×300 (D) mm Control Panel; 16 11/16" (W)×2 15/16" (H)×10 13/16" (D) 424 (W)×75 (H)×275 (D) mm
Weight (approx.)	Unit; 12.54 lbs. (5.7 kg) Control Panel; 4.84 lbs (2.2 kg)

CONTENTS

OPERATING INSTRUCTIONS 1

Outline

The Editing Controller AG-A800 makes it possible to configure mixed systems comprising not only the professional VTRs AG-7500/7510 but also the AU-650B for TV broadcasting applications.
This controller can control up to 3 VTRs.
If you use the optional switcher AG-SW800, the lines from the two VTRs on the source side and the external equipment can be switched by this controller and the audio/video signals can be transmitted to the VTR on the recorder side.
Insert, assemble, audio split and initial edits can be executed. The preroll time can be set for 3, 5, 7, 10 or 15 seconds. The data IN/OUT facility allows editing data communication with the personal computer using the RS-232C line.

Features

Operation with up to three VTRs
This unit is capable of operating with three VTRs: two Player VTRs (P VTRs) and a Recorder VTR (R VTR) using the optional Interface Board.

External Input
With the optional AG-SW800, an external signal can be input into the unit. For example, the camera signal and colour bar signal can be fed into this unit as external sources.

RS-232C Interface
This controller allows you to transmit the memory data to the external equipment through the DATA IN/OUT terminal in the RS-232C port and receive the data from the external source. With this port, communication with external devices, such as computer, is also made possible.

Multi Event Memory
This unit can enter up to 128 individual data items into its built-in EDL, (Edit Decision List).

CTL/TC Editing
Editing can be performed in combination with the Control (CTL) signal and the Time Code signal.

Audio Split Editing
The audio and video signals can be edited independently timing.

External Control Equipment
The auxiliary control connector enables connection to an external control unit.

TCG/TCR with the 34P I/F Board
With the optional 34-pin Interface Board, time code editing can be performed as the unit is equipped with a built-in TCR/TCG.

Standard Accessories

- 15P-15P Cable 5m
- Rack Mount Adaptors ..... 2 pcs

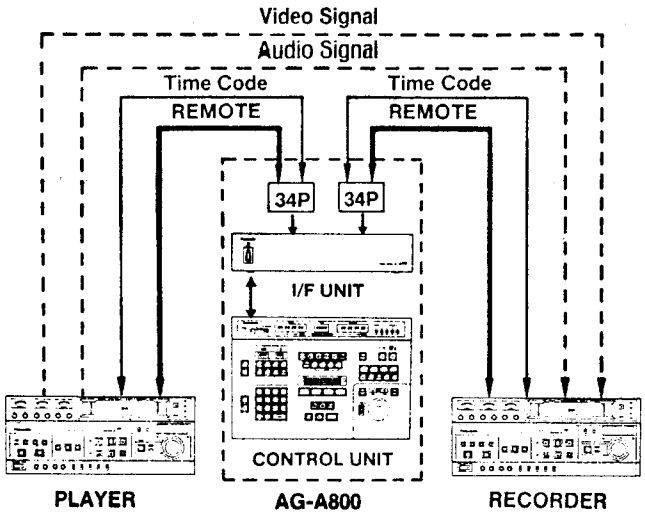
Optional Accessories

- 34P Interface Board AG-IA81
- 9P Interface Board AG-IA82
- Audio/Video Switcher AG-SW800
- Audio/Video Switcher Remote Controller AG-RM800

System Combinations

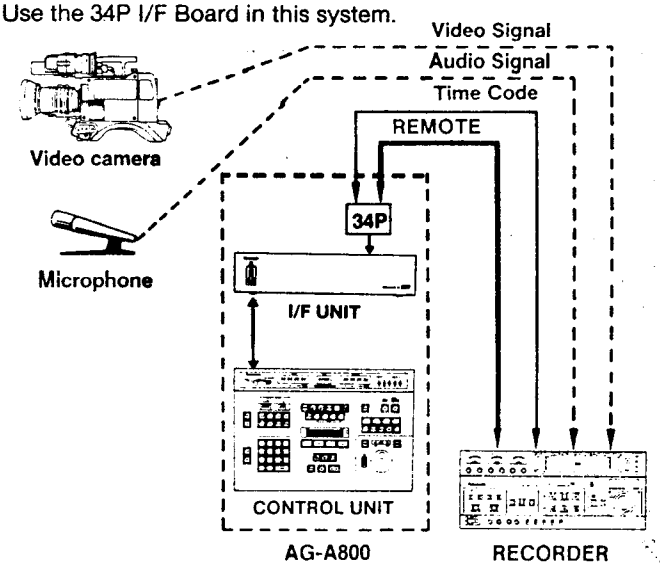
Basic system

This basic dubbing editing system is set up by connecting a PLAYER (P-VTR) and RECORDER (R-VTR) to this unit. Insert the 34P I/F Board into the unit.



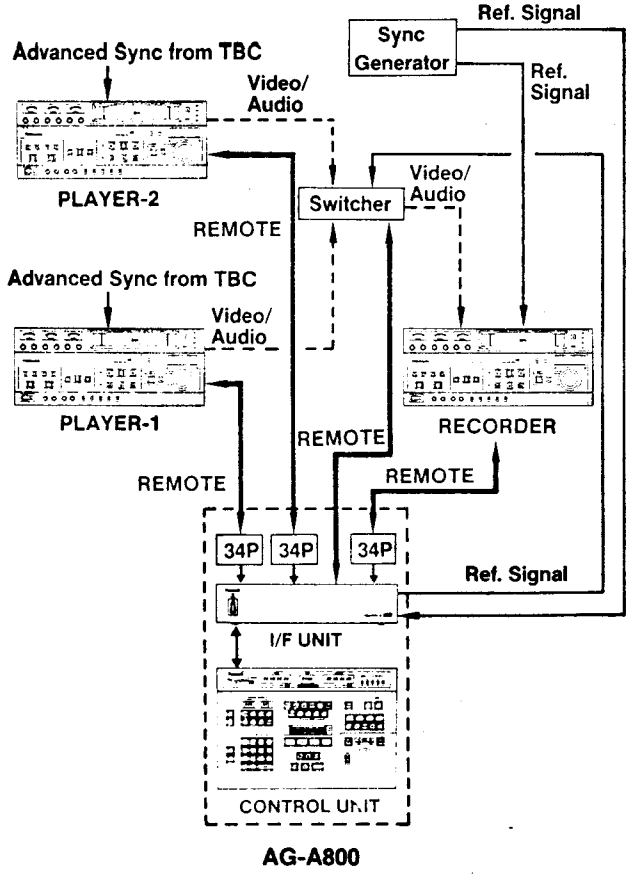
Connection to the video camera

This system is set up to edit the video signal from the video camera on the RECORDER.
Use the 34P I/F Board in this system.



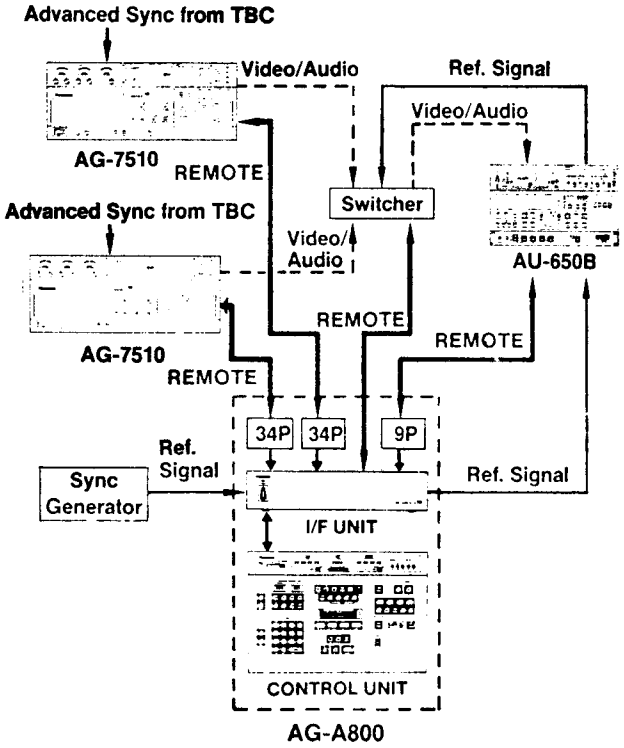
Connection to two PLAYERs

Two PLAYERs and the 34P I/F Board are used in this system.
Time Base Corrector can be required at any case.
For details, see page 12.



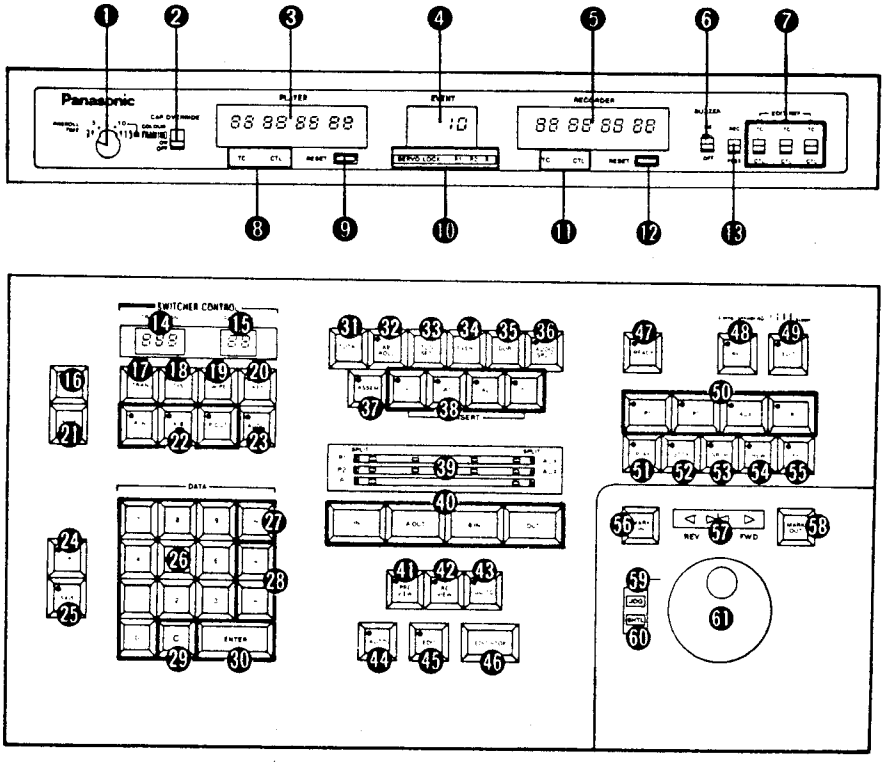
Connection to the MII VTR (9P I/F Board)

The MII VTR (AU-650B) and the 9P I/F Board are used in this system.
Time Base Corrector can be required at any case.



Controls and their Functions

CONTROL PANEL



❶ PREROLL TIME Selector Switch
Sets the preroll time to 3, 5, 7, 10 or 15 seconds. 10-second and 15-second setting are for colour frame editing.

❷ CAPSTAN OVERRIDE Selector Switch
Synchronization is executed by controlling the speed of the capstan on the VTR.

COLOUR FRAMING: To execute colour frame synchronized edits.
- When using the 34P I/F Board (using the S-VHS or VHS VTR), the VTR setting will be required.

ON: To execute an edit using a VTR that can execute synchronization.

OFF: The VTR will not execute synchronization. (Editing precision decreases.)

❸ DISPLAY For PLAYER
Displays the editing points, the current tape position of the PLAYER and error message.

❹ EVENT No. Display
Displays the event number.

❺ DISPLAY For RECORDER
Displays the editing points and the current tape position of the RECORDER.

❻ Buzzer ON/OFF
The setting of this switch determines whether the buzzer is activated or disabled.

ON → The buzzer will function whenever an operation error is detected.

OFF → The buzzer is disabled.

❼ EDIT REF Selector Switch
Selects the tape position displayed, either the time code (TC) or control signal (CTL).
Whether the reference signal is TC or CTL depends on the setting of this switch.

❽ ⓫ TC/CTL lamp
TC: This lamp lights up when the tape position is displayed from Time Code.

CTL: This lamp lights up when the tape position is displayed from the control signal (CTL).

❾ ⓬ RESET Button
If it is pressed when the CTL lamp is lit, the display indication of the currently selected VTR is reset to "0" and its edit data is erased.

❿ SERVO LOCK lamp
P1: Lights up when the cylinder and the capstan servo of PLAYER 1 are locked.

P2: Lights up when the cylinder and the capstan servo of PLAYER 2 are locked.

R: Lights up when the cylinder and the capstan servo of the RECORDER are locked.

⓭ REC RUN/FREE RUN Selector Switch
REC RUN: Time code increases when the VTR is in the REC mode.

FREE RUN: Time code increases irrespective of the VTR mode.

⑭ TRANSITION TIME DISPLAY
Used to display the transition time in frame units during the Wipe, Dissolve or DSK mode. Refer to page 41.

⑮ PATTERN NUMBER DISPALY
Used to display the number of patterns during the Wipe or Dissolve mode. Refer to page 41.

⑯ AUTO key/lamp
Used to set the edit point entry mode when the AG-SW800 audio/video switcher is used and the video picture is manually switched using the Take key. Refer to page 51.

⑰ TRAN key/lamp
Used to set the transition time. Refer to page 41.

⑱ DIS key/lamp
Used to switch the screen using the dissolve effect. After pressing this key, you can do different kinds of dissolve effects by specifying the number.
The P IN/OUT point will give a fade in/out effect.
Refer to page 46.

⑲ WIPE key/lamp
Used to switch the screen using the wipe effect. After pressing this key, you can use different wipe patterns by entering the pattern numbers. Refer to page 47.

⑳ KEY key/lamp
Used to set the down stream keyer effect. Refer to page 48.

㉑ TAKE key
If pressed when the sync-roll is executed, the switcher will switch the A roll to the B roll. Refer to page 51.

㉒ Effect point select key
Used to select the effect points.
P IN: Press this key to record the fade-in effect.
A/B: Press this key to record effect at the A/B point.
P OUT: Press this key to record the fade-out effect.

㉓ AUDIO key/lamp
Used to record the audio effect. Release the key to record the normal video effect. Refer to page 50.

㉔ LOAD key/lamp
If pressed, the lamp will light up and the edit data will be entered from the computer through the 25-pin DATA IN/OUT terminal. Refer to page 65.

㉕ SAVE key/lamp
If pressed, the lamp will light up and the edit data will be output to the computer through the 25-pin DATA IN/OUT terminal. Refer to page 65.

㉖ 10 key Numeric Pad
Used to enter the desired numbers of the edit IN/OUT points, and event after selecting the registering mode.

㉗ ~ key
Used to set or check the range for automatic edits.
Press this key to set or check the range of the automatic editing. (See pages 35, 60.)

㉘ +, − key
Used to change the edit point by addition and subtraction.

㉙ C (Clear) key
Press this key to delete the registered data.

㉚ ENTER key
Used for executing the entry.

㉛ TOTAL key
After this key is pressed, the display shows the time from the start point to the current OUT point of the event on the RECORDER tape. If no OUT point of the RECORDER has been registered, the time to the IN point of the RECORDER will be shown on the display. Also, the error code is displayed on the PLAYER display. (See pages 55 and 72.)

㉜ A/B ROLL key/lamp
Press this key to set the unit to the A/B mode. In this mode, two PLAYERs can be used for an edit. When the unit is set to the normal mode, this lamp will go out.

㉝ TCG SET key
Used to set the TC (time code).

㉞ EVENT key
Press this key to set or change event numbers.

㉟ DUR (Duration) key
Press this key to check the time length of an edit.
(See page 59.)

㊱ AUDIO SPLIT key/lamp
Press this key to enter audio edit points only. After these points have been entered, the lamp goes out and the video edit points can be entered.

㊲ ASSEM key/lamp
Press this key to execute assemble editing.

㊳ V, A1, A2, TC keys/lamps
Used in the insert editing mode.
V: Press to select the video signal.
A1: Press to select the signal of Audio Channel 1.
A2: Press to select the signal of Audio Channel 2.
TC: Press to select the time code signal.
Note: This key can not be used when a 34-pin I/F Board has been installed in the RECORDER VTR.

㊴ EDIT POINT Entry lamp
Lights up when an edit point is entered.
(See page 57.)

㊵ EDIT POINT (IN/ A OUT/ B IN/ OUT) Selection keys
Used to enter or check the edit points.

㊶ PREVIEW key/lamp
Used to rehearse the editing process.

㊷ REVIEW key/lamp

If this key is pressed when editing has been carried out, the tape will automatically return to the beginning of the EVENT which has just been edited. This allows confirmation of editing results.

㊸ GO TO key/lamp

Press this key to have access to edit points or desired points input with the 10 key Numeric Pad.

㊹ AUTO key/lamp

Used for automatic continuity editing.
If pressed together with the Edit (Preview or Review) key, the lamp will light up and the specified events will be edited automatically and continuously (automatic review or preview). Refer to page 34.

㊺ EDIT key/lamp

Press this key to edit the current event indicated on the display panel.

㊻ EDIT STOP key

Press this key to stop an edit halfway.
If no edit OUT point has been entered on the RECORDER, the position of the tape where this key was pressed will be entered as the edit OUT point. The tape will be postrolled and rewound to the edit OUT point.

㊼ READY key/lamp

This is the Standby ON/OFF key with lamp. To set the Standby OFF mode on the VTR during the Standby ON mode (the lamp lights up), press this key. The lamp will go out. If the key is pressed again, the Standby ON mode will be set and the lamp will light up.
In VHS recording systems, Pause will be set if the mode is Standby ON and Stop if it is Standby OFF.

㊽ REC key/lamp

Press this key together with the PLAY key to start the recording of the video and audio signals. (Only when RECORDER is selected for the VTR.) Also, when pressed alone, the RECORDER switches to the E-E mode.

㊾ EDIT key/lamp

Press this key and the PLAY key ㊶ together to execute an edit manually during playback. The lamp will light up. (See page 28.)

- According to the VTRs, the preroll operation may excute during manual editing (On-The-Fly editing).

㊿ VTR (P1/P2/R/AUX) Selection keys/lamps

Select the VTR to be controlled.

P1 and P2 .....Control the PLAYERs
R .....Controls the RECORDER
AUX .....Executes recording of edit points for the external equipment.

- Used to switch the output on the AG-SW800 if it is connected.

(51) PLAY key/lamp

Press this key to play back the tape on the VTR selected by the VTR SELECTION key.

(52) STOP key/lamp

Press this key to stop the VTR tape movement.
If pressed, the lamp will light up and the tape on the selected VTR will stop running. If the VTR is VHS, the Pause mode will be set.

(53) SRCH (Search) key/lamp

Press this key to set the search mode on the VTR selected by the VTR SELECTION key.
Use the SEARCH DIAL (61) to control the tape movement.

(54) REW key/lamp

Press this key to rewind the tape.

(55) FF key/lamp

Press this key to fast forward the tape.

(56) (58) MARK IN/OUT keys

These are the edit point entry keys. Press these keys to enter the edit IN/OUT points.

(57) SEARCH Indicator

Indicates the tape movement direction controlled by the SEARCH DIAL and the still picture mode.

(59) JOG lamp

Lights up in the JOG Mode.

(60) SHTL lamp

Lights up in the SHUTTLE mode.

(61) SEARCH DIAL

Used to search for the required picture, such as the edit points.

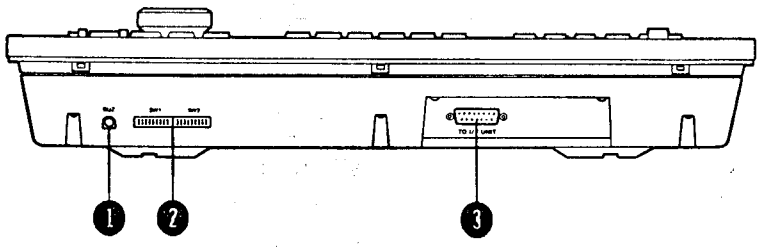
JOG mode ( )

The JOG lamp lights up when the unit is in this mode.
The picture can be played forwards or backwards depending on the SEARCH DIAL movement at up to double the speed, i.e., from 0 speed (still picture).

SHTL mode ( )

The STHL lamp lights up when the unit is in this mode.
The picture can be played forwards or backwards depending on the SEARCH DIAL movement at up to 10 times the normal speed (when using AG-7500/7510).

CONTROL PANEL CONNECTORS

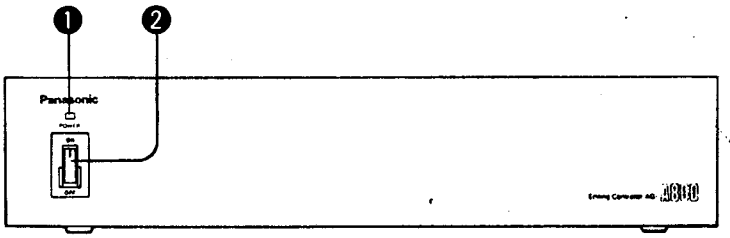


❶ BUZZER Volume Control
Adjusts the buzzer volume.

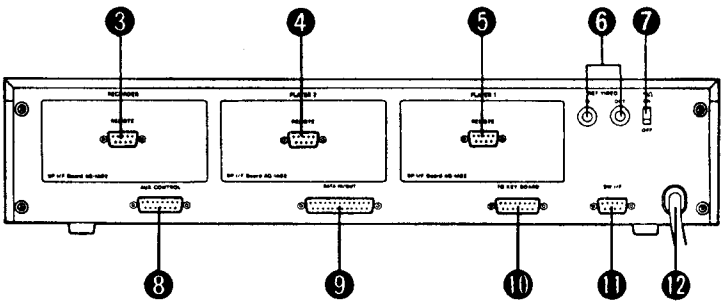
❷ DIP Switch SW1 and SW2
For details, refer to page 69.

❸ TO I/F UNIT Connector (15P)
Used to connect the unit to the 15-pin "TO KEYBOARD Connector" on the I/F UNIT.

I/F UNIT



I/F UNIT CONNECTORS



❶ POWER Indicator
Lights up when this unit is turned on.

❷ POWER Switch

❸ RECORDER Slot
Connects to the REMOTE Connector on the RECORDER with the optional 9-pin (AG-IA82) or 34-pin (AG-IA81) interface board installed into the unit.

❹ PLAYER 2 Slot
Connects the REMOTE Connector on PLAYER 2 to the optional 9-pin or 34-pin interface board installed into the unit.

❺ PLAYER 1 Slot
Connects the REMOTE Connector on PLAYER 1 to the optional 9-pin or 34-pin interface board installed into the unit.

❻ REF VIDEO IN/OUT Connectors (BNC)
Used to control the VTRs connected to the unit by the synchronizing (reference) signal.

❼ 75 ohm Termination Switch
Set this switch to "ON" to terminate the reference signal on the unit and "OFF" to use for loop through.

❽ AUX CONTROL Connector (15P)
Used to connect this controller to output the start pulse to the external unit. (See page 71.)

❾ DATA IN/OUT Connector (25P)
Used for the connection of the personal computer with the RS-232C cable.

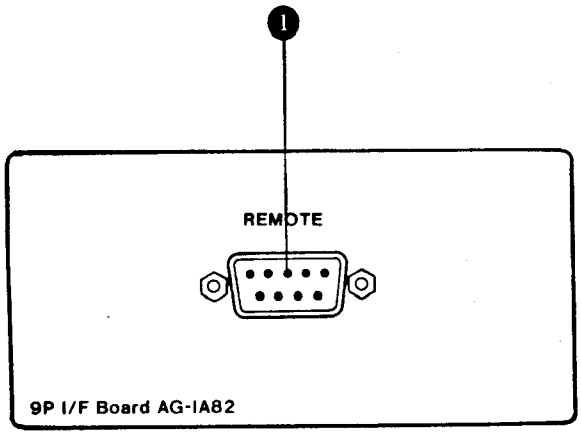
❿ TO KEYBOARD Connector (15P)
Used to connect this unit to the 15-pin "TO I/F UNIT" Connector on the CONTROL PANEL.

⓫ SW I/F Connector (9P)
Used to connect this unit to the 9-pin "EXT CONTROL IN" Connector on the optional switcher (AG-SW800).

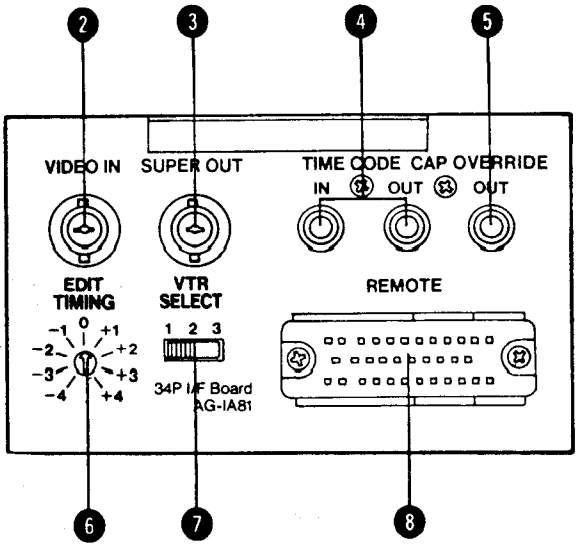
⓬ POWER Cord
Connects this unit to the AC outlet.

INTERFACE BOARD

9P (AG-IA82)



34P (AG-IA81)



9 Pin Interface

Use this interface board when connecting the unit to the Studio MII VTR for broadcast.

❶ REMOTE Connector (9P)

Used to connect to the REMOTE Connector of the VTR.

34 Pin Interface

Use this interface board to connect the unit to the AG-7500, AG-7510 and AG-6500

❷ VIDEO IN Connector (BNC)

Used to connect to the VIDEO OUT Connector of the VTR. This connector must be connected in order to perform time code editing.

❸ SUPER OUT Connector (BNC)

Used to connect a TV monitor to superimpose the time code on the video signal from the VIDEO IN Connector.

❹ TIME CODE IN/OUT Connector (PHONO)

As the unit is equipped with a time code reader/generator, connect to the TC IN/OUT Connector of the VTR when time code editing is exeuted.

❺ CAPSTAN OVERRIDE OUT Connector (PHONO)

Used to connect the unit to the CAPSTAN OVERRIDE IN of the VTR.

❻ EDIT TIMING Adjust Switch

Used to adjust the play start time in frame units.

❼ VTR SELECT Switch

Set this switch as shown below according to the type of VTRs. (See page 78.)

Position of Switch	VTR type
1	AG-7500, AG-7510 (S-VHS)
2	AG-6500 (VHS)
3	NV-9600, NV-9240

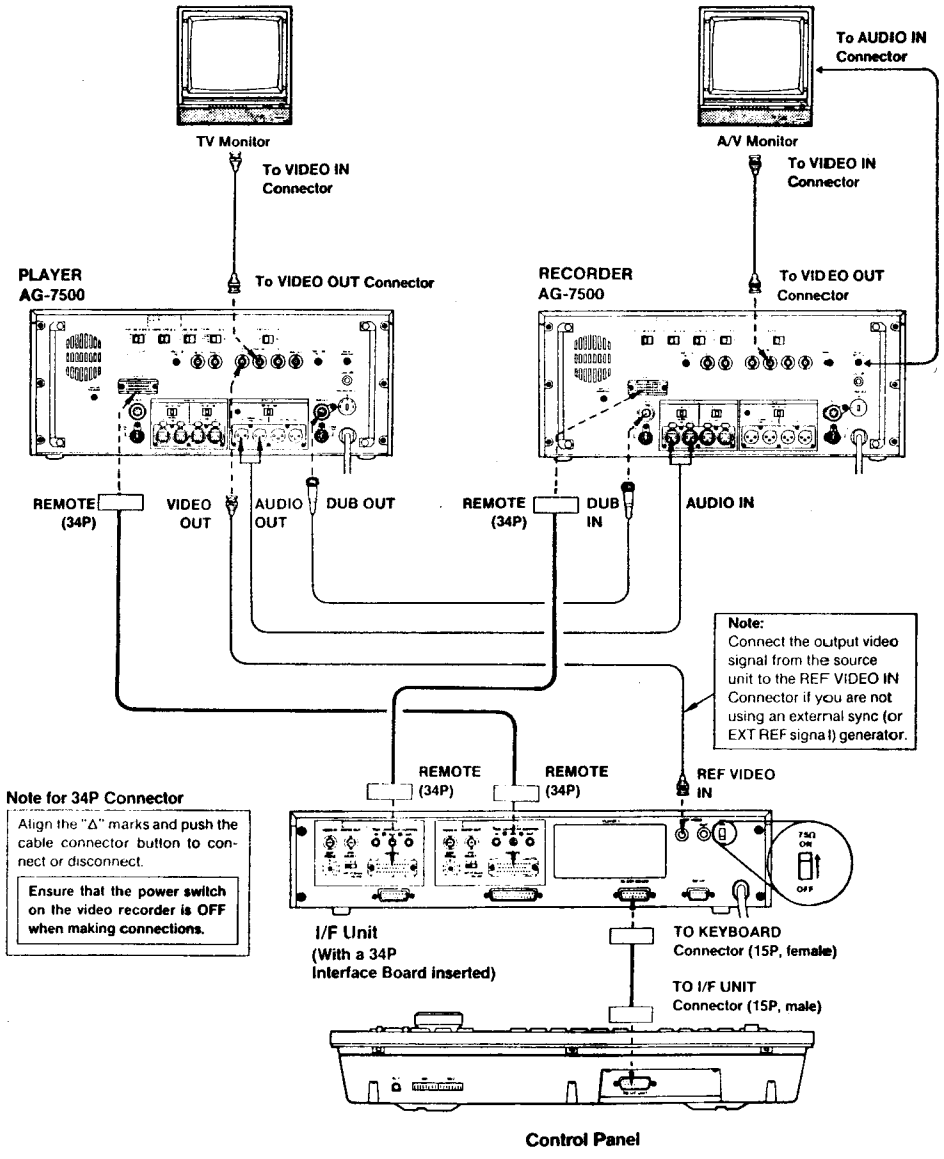
❽ REMOTE Connector (34P)

Used to connect to the REMOTE Connector of the VTR.

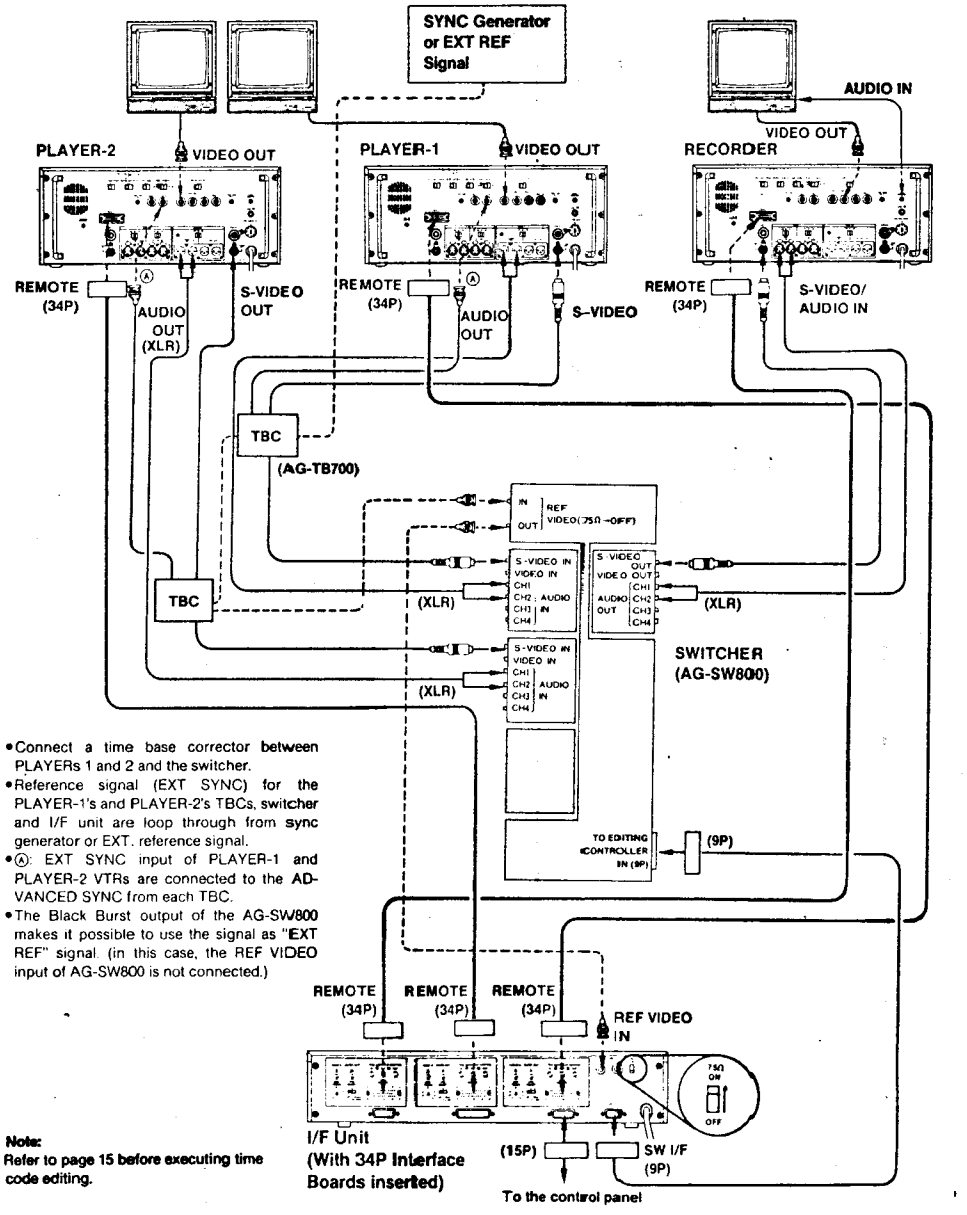
* These interface boards can be used to both PLAYER and RECORDER VTR side.

Connections

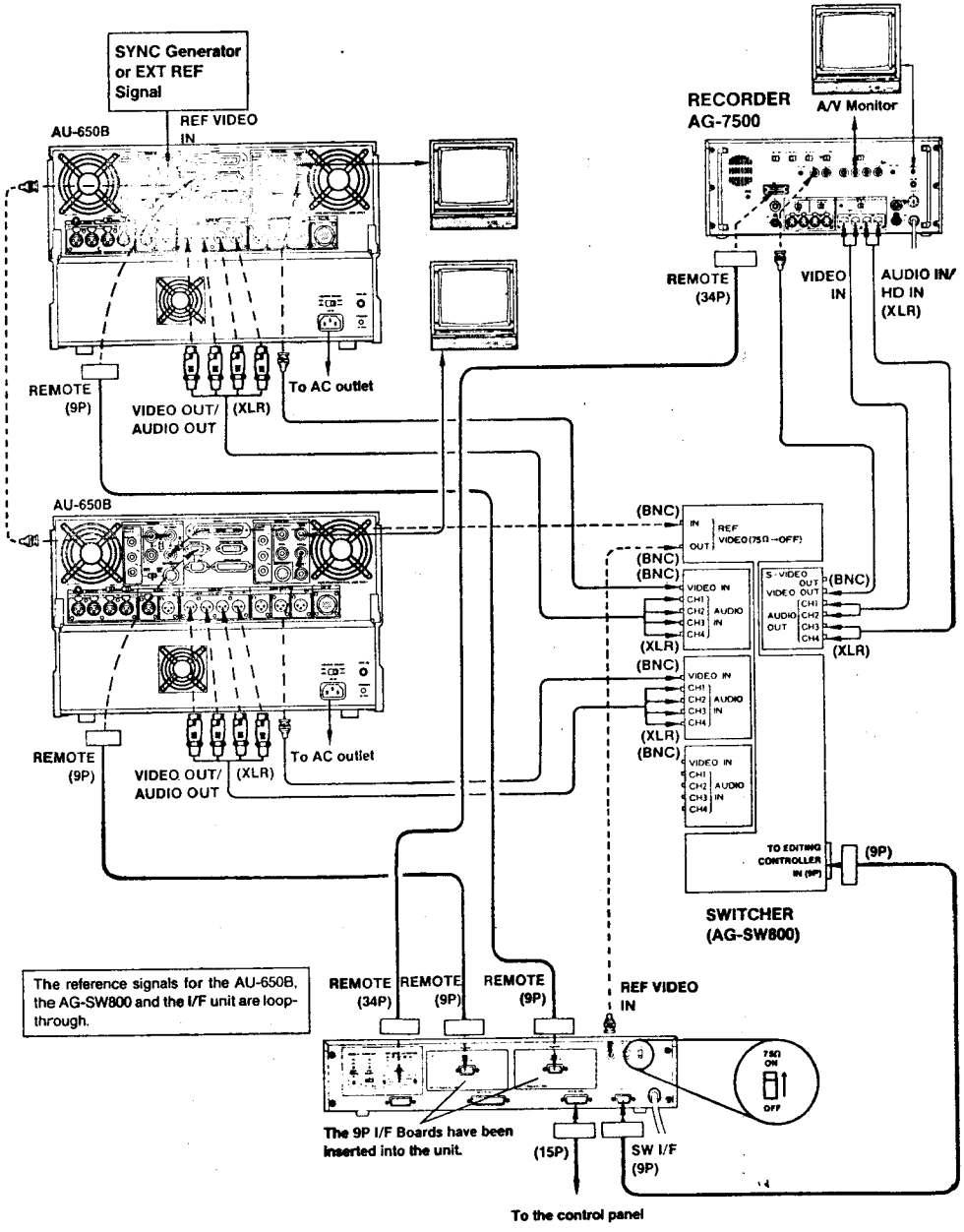
Basic Connection


TV Monitor
To VIDEO IN Connector
A/V Monitor
To AUDIO IN Connector
To VIDEO IN Connector
PLAYER AG-7500
To VIDEO OUT Connector
RECORDER AG-7500
To VIDEO OUT Connector
REMOTE (34P)
VIDEO OUT
AUDIO OUT
DUB OUT
REMOTE (34P)
DUB IN
AUDIO IN
Note:
Connect the output video signal from the source unit to the REF VIDEO IN Connector if you are not using an external sync (or EXT REF signal) generator.
REMOTE (34P)
REMOTE (34P)
REF VIDEO IN
Note for 34P Connector
Align the "Δ" marks and push the cable connector button to connect or disconnect.
Ensure that the power switch on the video recorder is OFF when making connections.
I/F Unit
(With a 34P Interface Board inserted)
TO KEYBOARD Connector (15P, female)
TO I/F UNIT Connector (15P, male)
Control Panel

Connections for A/B Roll Editing

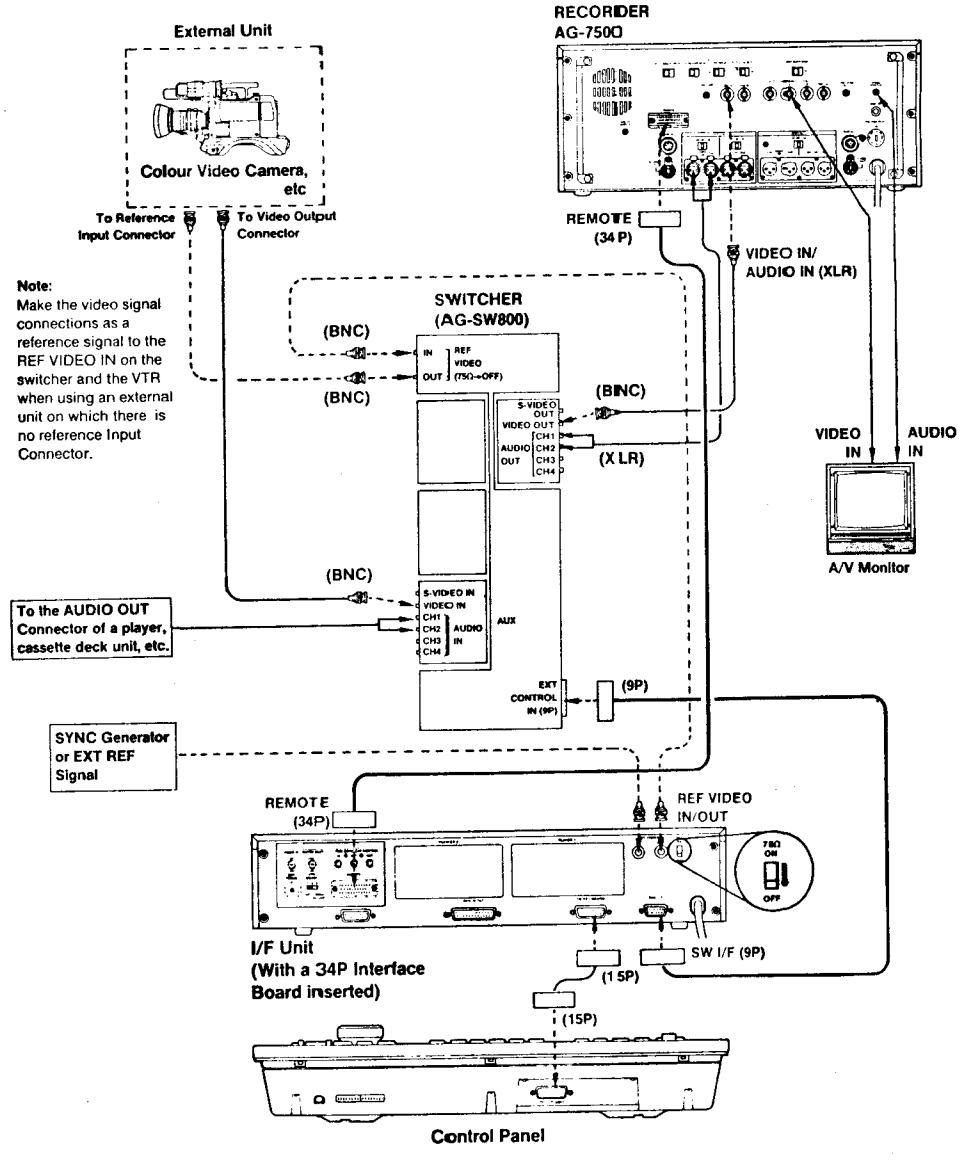

SYNC Generator or EXT REF Signal
PLAYER-2
VIDEO OUT
PLAYER-1
VIDEO OUT
RECORDER
AUDIO IN
VIDEO OUT
REMOTE (34P)
AUDIO OUT (XLR)
S-VIDEO OUT
REMOTE (34P)
AUDIO OUT
S-VIDEO
REMOTE (34P)
S-VIDEO/ AUDIO IN
TBC
(AG-TB700)
TBC
(XLR)
(XLR)
(XLR)
SWITCHER
(AG-SW800)
TO EDITING CONTROLLER IN (9P)
(9P)
• Connect a time base corrector between PLAYERs 1 and 2 and the switcher.
• Reference signal (EXT SYNC) for the PLAYER-1's and PLAYER-2's TBCs, switcher and I/F unit are loop through from sync generator or EXT. reference signal.
• Ⓐ: EXT SYNC input of PLAYER-1 and PLAYER-2 VTRs are connected to the ADVANCED SYNC from each TBC.
• The Black Burst output of the AG-SW800 makes it possible to use the signal as "EXT REF" signal. (in this case, the REF VIDEO input of AG-SW800 is not connected.)
REMOTE (34P)
REMOTE (34P)
REMOTE (34P)
REF VIDEO IN
I/F Unit
(With 34P Interface Boards inserted)
(15P)
SW I/F (9P)
To the control panel
Note:
Refer to page 15 before executing time code editing.

Connections for Editing by using the 9P I/F Board (option)



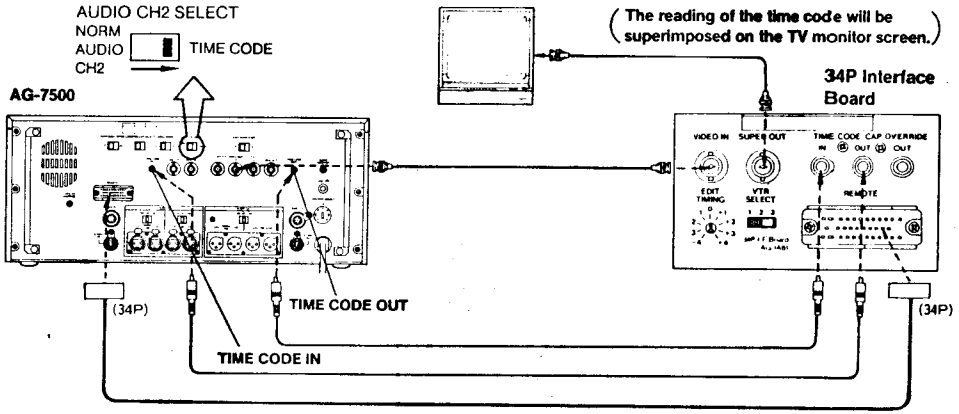
Connection to an External Unit (AUX)

This unit can be connected to a Camera or Teloper which may be used as external auxiliary units.


External Unit
Colour Video Camera, etc
To Reference Input Connector
To Video Output Connector
RECORDER AG-7500
REMOTE (34P)
VIDEO IN/ AUDIO IN (XLR)
Note:
Make the video signal connections as a reference signal to the REF VIDEO IN on the switcher and the VTR when using an external unit on which there is no reference Input Connector.
SWITCHER (AG-SW800)
(BNC)
(XLR)
VIDEO IN
AUDIO IN
A/V Monitor
To the AUDIO OUT Connector of a player, cassette deck unit, etc.
SYNC Generator or EXT REF Signal
(9P)
REMOTE (34P)
REF VIDEO IN/OUT
I/F Unit (With a 34P Interface Board inserted)
(15P)
SW I/F (9P)
Control Panel

Connection for Using the Time Code Signal

If the time code signal has been recorded on the tape, precision edits can be executed because the position of the tape is indicated accurately.

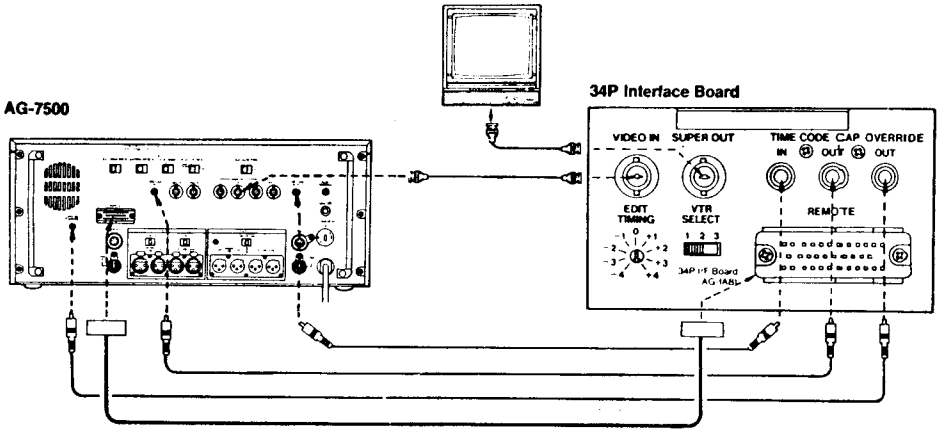


- This interface board equipped with a time code generator reader is capable of executing time code editing when it is connected to the time code IN/OUT connectors on the VTR.
- When time code editing is executed on S-VHS or VHS tapes, the normal CH2 audio signal can not be recorded because the time code (TC) signal will be recorded on the track for the normal audio of CH2.

Connection for Synchronization

This unit can reduce errors by connecting VTRs equipped with connector for synchronization, i.e. CAPSTAN OVERRIDE connector when synchronized editing is executed.

- To execute normal editing, connect the controller to the RECORDER VTR.
- To execute A/B roll editing, connect the controller to both PLAYER and RECORDER VTR.
- Please refer to page 69 in the setting of the DIP switch 1-4~6 on "DIP Switch Settings".



Preparations

Preparations of the VTR connected to this unit

After connecting the unit to the AG-7500, AG-7510 and AG-6500:

- Set the CONTROL switch to "REMOTE".
- Set the CONTROLLER selector to "1".
- Set the EDIT switch to "ON".
- When executing time code editing, set the AUDIO CH2 selector to "TIME CODE".
- When inputting the external SYNC signal, set the SYNC switch to "EXT".
- Set the FRAME SERVO switch to "FRAME". (When executing colour frame editing, set to "COLOUR")

After connecting the unit to the AU-650B:

- Set the CONTROL switch to "REMOTE".
- Set the REMOTE switch to "REM 2 (9P)".

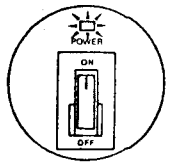
Preparation for connecting the Switcher AG-SW800

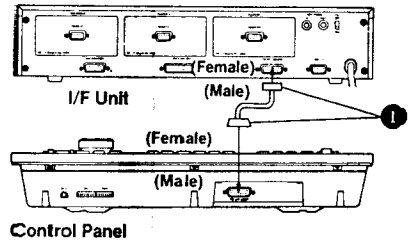
Set the CONTROL switch to "REMOTE".

Preparations of this unit

❶ Connect the "TO KEYBOARD" Connector (15P, female) on the I/F Unit to the "TO I/F UNIT" Connector (15P, male) on the control panel.

❷ Turn on the Power Switch. The corresponding indicator will light up.

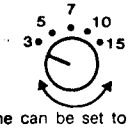




● Check that all the displays are in operation. The current positions of the ta pes on the selected VTRs are shown on the displays of the players and recorder.
If the displays are not operating, turn the unit off and then on after verifying that the VTRs are properly connected.

❹ Set the switches on the Control Unit as required.

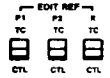
Set the preroll time with the **PREROLL TIME** Selector Switch.



The preroll time can be set to **3, 5, 7, 10 or 15** seconds.

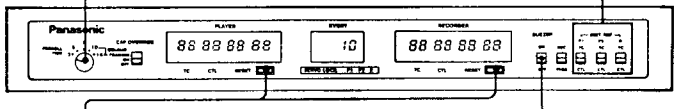
Note:
When executing colour frame editing, adjust the duration of the preroll time to more than 10 seconds. Set it to more than 5 seconds to execute an edit accurately by controlling the speed of the capstan on the VTR.

Select the reading mode for the positions of the tapes to be shown on the displays for the players and recorder: Time Code (TC) or Control (CTL).

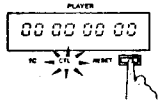


Note:
Do not change the setting of this switch when entering the edit points. Make sure to set the switch before the entry of the edit points.

- When executing automatic editing, only use the time code signal. If the control sign is used, values will not be read by the VTR accurately.



In the **CTL mode,** press the RESET buttons to reset the positions on the displays for the players and recorder. When these buttons are pressed, the readout displays will be reset to "00 00 00".



Note:
If an edit point is recorded with the Control (CTL) signal, the record data of the VTR selected by the EVENT displayed by pressing the RESET button will be erased.
Therefore, do not press this button.

Buzzer ON/OFF switch

ON .....To enable operation to be verified, the buzzer emits a single beep when edit points are entered or when cutting in or out during editing. It beeps 3 times as a warning when a mistake is made in operation or editing.

OFF .....The buzzer does not beep.

Note:
In the case of a warning, press the TOTAL key to display the error message.

Set the CAP OVERRIDE Selector Switch to any of the positions below as desired.

COLOUR
FRAMING ...To execute colour framing editing on the VTR.
ON .....To be set when executing an edit at frame 0 which is the edit IN point.
OFF .....To be set when using a VTR that can not execute synchronization.

Note:
Change the DIP switch setting on the control unit (see page 69) when executing an edit with a VTR on which there is no CAP OVERRIDE Connector. Set this switch to the "OFF" position when using a 3/4-inch VTR.

Set this switch as desired when time code editing is executed.
REC .....For time code generation when the VTR is in the recording mode. The counting will start simultaneously at the beginning and stop at the end of the recording.
FREE ....For continuous time code generation regardless of the VTR operational mode. When the generator has been adjusted to the standard clock time, the duration time of the recording can be recorded on tape.

Note:
This switch has no effect when a 9-pin interface board is used.

Editing

The flow chart of the basic editing operation is shown below.
Refer to this chart to make edits.

■ To create the edit tape, follow the procedure for initial edits ..... Refer to page 19.

1. Selecting the editing mode
Select either Assemble or Insert. ..... Refer to page 20.

2. Selecting the VTR
Select the VTR Player (1 or 2), auxiliary equipment or VTR recorder on which the edit points are entered. ..... Refer to page 21.

3. Entering the edit points
There are three ways of entering the points and these are as follows:
- Enter the points with the Mark IN and Mark OUT keys after locating them with the search dial.
- Enter the points with the numeric keys.
- Enter the points with the + and – keys. ..... Refer to page 21.

■ Checking the edit data ..... Refer to page 56.

4. Preview
Without making the actual edit it is possible to play a rehersal of the edit, if you wish. ..... Refer to page 25.

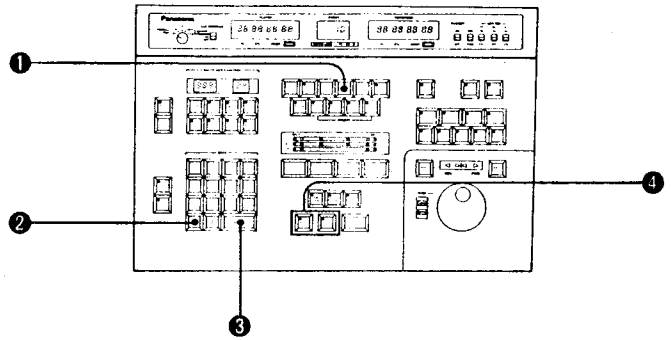
5. Starting the editing
- When executing automatic continuity editing or entering the edit data for the next event without starting the edit immediately, repeat all the procedure from step 1. ..... Refer to page 26.

6. Review
Check the result of the edit recorded on the tape. ..... Refer to page 27.

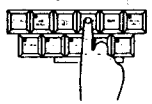
Note:
The flow chart above is only for basic editing operation.
There are other procedures for manual, A/B roll, sync-roll and audio split editing.

Initial Editing

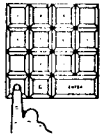
When executing an edit on a blank tape on which no reference signal (black burst) has been recorded or on the pre-recorded tape, the reference signal is necessary to perform the edit
If the AG-SW800 is not connected, input the composite signal (black burst signal, etc.) to the input terminal of the recorder side VTR.



❶ Press the EVENT key.

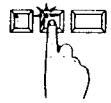


❷ Type "0" using the 10 key Numeric Pad.

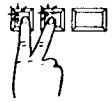


❸ Press the ENTER key.

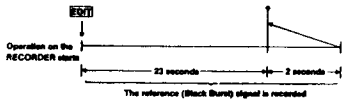
❸ Press the EDIT key to record the reference signal on the preroll portion of the tape. The EDIT lamp will light up.



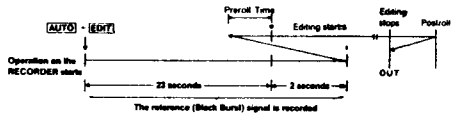
•Press the EDIT key while holding down the AUTO key to execute assemble editing after entering event number 0000. The AUTO and EDIT lamps will light up.



<Initial Edit Function>



•After the end of the initial edit the tape will stop at the IN point of the initial event.



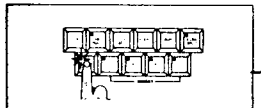
•After the end of the initial edit the edit of the first event will start.

•It is possible to rewind the tape to the beginning at initial edit even from the middle of the tape.
•If edit data is recorded on the tape, the tape is rewound to the beginning and the time code display shows a value 23 seconds less than the first event RECORDER IN point.
•If edit data is not recorded on the tape, the tape is rewound to the beginning and the time code display reads "00:00:00:00".

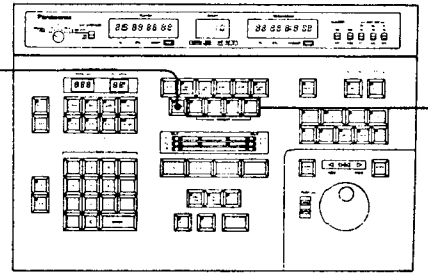
Basic Editing Operation

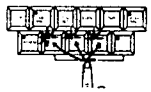
You can perform the different kinds of editing operation, including the manual, A/B roll, sync-roll editing and the edit using the Edit keys with this controller. The procedures for basic editing are described below. Follow them when making edits.

1. Editing Operation Selection



Press the ASSEM key to record the video and audio signals. The corresponding lamp will light up.





Press any of the keys desired in the insert editing mode.

Press the key again to cancel the mode selected.

■ Assemble editing

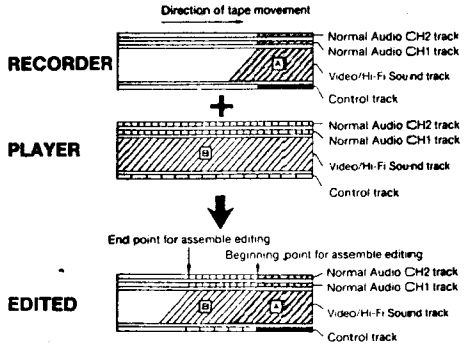
"Assemble editing" permits the user to add program material to the end of a previously recorded portion, thus making one continuous, uninterrupted program from many segments. Video/Hi-Fi Sound (CH1/CH2) and Normal Audio CH1 and CH2 or Time Code are all edited at the same time. As shown in the illustration, suppose that part A had been previously recorded. To this, a new program B is added. This results in a new program consisting of A and B.

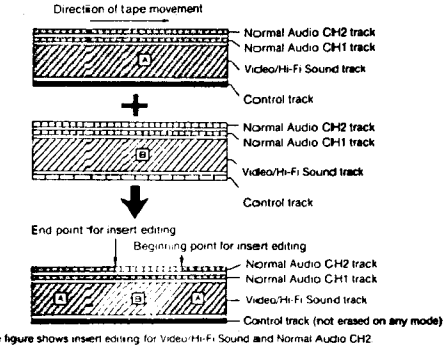
•Video and Hi-Fi Sound cannot be separated during editing. Hi-Fi sound will be erased with the Video signal.
•The noise may appear on the IN point with Hi-Fi Sound.

■ Insert editing

"Insert editing" permits the user to add program material somewhere in the middle of a previously recorded portion. As shown in the illustration, the new program material B is added between parts of the already-recorded material A. The result is a new program consisting of parts A, B, A. For insert editing it is possible to insert only Video/Hi-Fi Sound (CH1/CH2), Normal Audio CH1, Normal Audio CH2 (or Time Code), or any combination of these.

Note:
If the AUDIO CH2 SELECT Switch on a VHS or S-VHS VTR that is used for editing is set to "TIME CODE", the A2 key will allow recording of the TC signal for channel 2.
•The noise may appear on the IN and OUT point with Hi-Fi Sound.



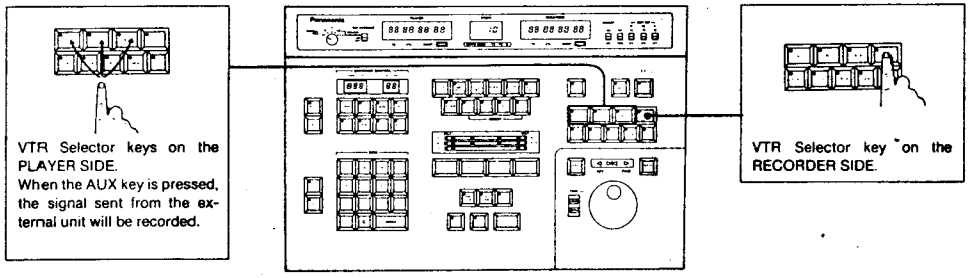

Direction of tape movement
Normal Audio CH2 track
Normal Audio CH1 track
Video/Hi-Fi Sound track
Control track
End point for insert editing
Beginning point for insert editing
Control track (not erased on any mode)

The figure shows insert editing for Video/Hi-Fi Sound and Normal Audio CH2.

Editing mode button operation
•The insert-editing mode is established when moving from ASSEMBLE to the V, A1, A2 or TC buttons.
•The assemble-editing mode is established when moving from V, A1, A2 or TC to the ASSEMBLE button.
•When A1 (V, A2 or TC) is pressed twice during insert-editing, the A1 (V, A2 or TC) lamp goes off, indicating this mode is not selected.
•During insert-editing, insert editing mode (V, A1, A2 and TC) can be changed but the editing mode cannot be changed from insert to assemble (or assemble to insert).
•When the editing mode is not selected, the editing mode lamp will flash to draw attention to the editing mode setting.

2. VTR or External signal selection

The VTRs selected are controlled by this controller.

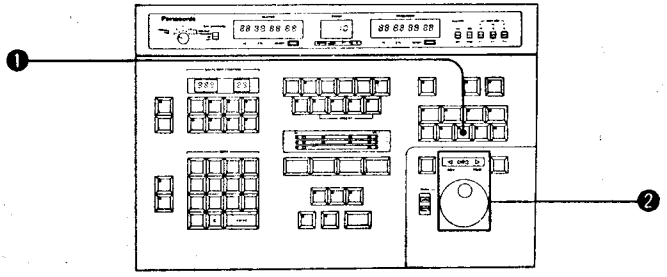

VTR Selector keys on the PLAYER SIDE.
When the AUX key is pressed, the signal sent from the external unit will be recorded.
VTR Selector key on the RECORDER SIDE.

3. Entering the Edit Points

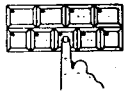
There are three ways of entering the points and these are as follows:

1. Enter the points with the Mark IN and Mark OUT keys after locating them with the search dial.
2. Enter the points with the numeric keys.
3. Enter the points with the + and − keys.

3-1. Entering the Edit Points with the Mark IN and Mark OUT Keys

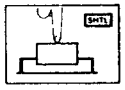


❶ Press the SRCH key.

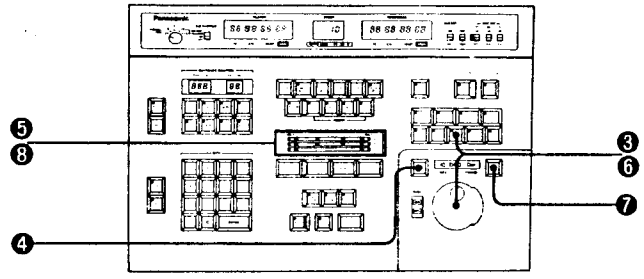


•If the JOG lamp lights up, press the SHUTTLE dial to set the unit to the SHUTTLE mode.

SHUTTLE Mode

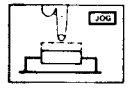


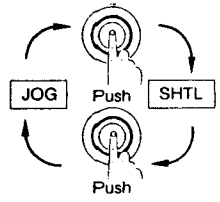
❷ Rotate the search dial to look for the edit point and set the PLAYER to the still playback at the edit point.



❹ Set the PLAYER to the JOG mode to look for the edit point more accurately.

JOG Mode



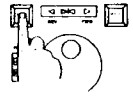


•SHUTTLE and JOG modes can be selected by pushing the dial.
•The tape speed varies with the rotation speed of the dial.

The JOG function switches the tape movement from still to double (2×) the speed when the JOG dial is rotated. When the dial is not rotated, the VTR is always set in still playback.

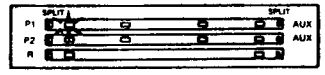
The tape speed can be increased up to double the speed in JOG mode. It is convenient to use JOG mode when getting close to the edit points and to use the SHUTTLE mode when there is a need to search a great distance of tape.

❹ Stop the rotation of the Search dial at the edit point. Press the Mark IN key.



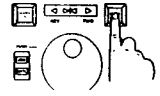
❺ The IN lamp will light up and the current position of the tape on the VTR will be entered as the edit IN point.

EXAMPLE:
When the edit IN point of the PLAYER is entered, the P1 lamp lights up.

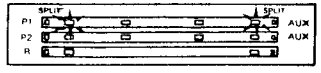


❻ Rotate the Search dial to search for the edit out point. Stop the rotation of the Search dial at the edit out point.

❼ Press the Mark OUT key.



❽ The current position of the tape on the VTR will be entered as the OUT point and the OUT lamp will light up.



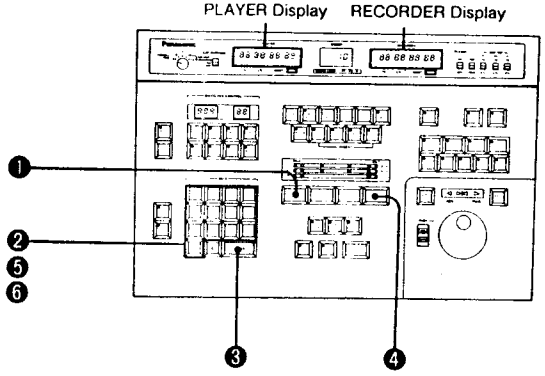
❾ After entering the edit points from the VTR on the player side, return to step "2. VTR or External signal selection" and select the VTR on the recorder side, and then enter the points on this VTR following the procedure indicated in step "3. Entering the Edit Point".
•If the entered edit points are to be altered or changed, replace them with new edit points.

Notes

•If 3 edit points (5 in the A/B roll mode) are entered, the last will be entered automatically by calculation. The lamp will not light up.
•The edit points cannot be entered if there is a mismatch between the IN and OUT points.

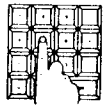
3-2. Entering the Edit Points Using the Numeric Keys

Apart from the search dial, the time code or control signal can also be used to enter the edit points by specifying the signal with the numeric keys.

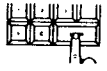


❶ Press the IN key.

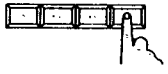
❷ Enter the value of the TC or CTL signal of the desired edit IN point (Hr: Min: Sec: Frame) using the 10 key Numeric Pad.



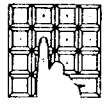
❸ Press the ENTER key to enter the edit IN point.



❹ Press the OUT key.



❺ Enter the OUT point (Hr: Min: Sec: Frame) using the 10 key Numeric Pad.



❻ Press the Enter key to enter the edit points.
The OUT point will be entered and the OUT lamp will light up.

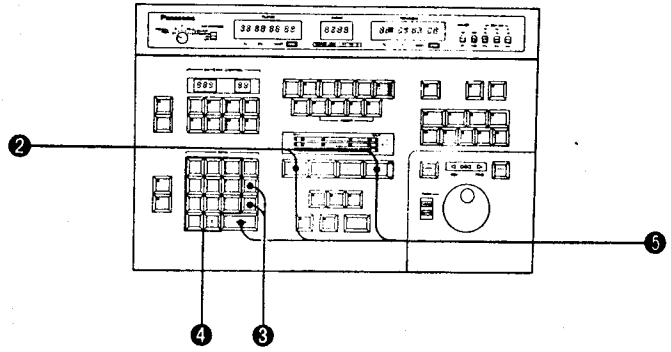
❼ After entering the edit points on the player VTRs side, return to step "2. VTR or External signal selection" and select the VTR on the recorder side.
Enter the edit points on this VTR by following the procedure in step "3. Entering the Edit Point".
•If the entered edit points are to be altered or changed, replace them with the edit points.

Notes

•To enter the edit points on the A roll side during the A/B roll editing mode, press the A OUT key instead of the OUT key in step ❹.
•To enter the edit points on the B roll side, press the B IN key instead of the IN key in step 1. The other procedures are the same as those from step ❷ to ❺.

3-3. Entering the Edit Points Using the +/– Keys

These keys are used when entering the edit points by specifying the duration of the editing.
Make sure to enter one of the edit points (IN or OUT) when using the + or – key.

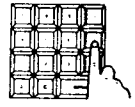


•When using the + key. Entering the edit IN point and specifying the duration of the editing.

❶ Enter the edit IN point using the Mark IN key or numeric keys. Refer to page 21.
The IN point lamp will light up.

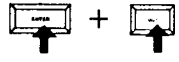
❷ Press the IN key.

❸ Press the PLUS (+) key.



❹ Enter the duration of the editing (Hr: Min: Sec: Frame) using the 10 key Numeric Pad.

❺ Press the OUT key while holding down the ENTER key (or press the ENTER key after press the OUT key).



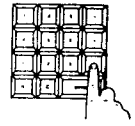
•For Audio Split Editing
Refer to page 37.

•When using the – key. Entering the edit OUT point and specifying the duration of the editing.

❶ Enter the edit OUT point using the Mark OUT key or numeric keys. Refer to page 21.
The OUT point lamp will light up.

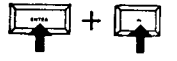
❷ Press the OUT key.

❸ Press the MINUS (–) key.



❹ Enter the duration of the editing (Hr: Min: Sec: Frame) using the 10 key Numeric Pad.

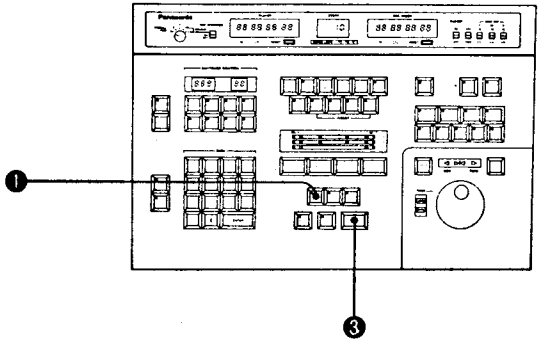
❺ Press the IN key while holding down the ENTER key.



4. Preview

Preview is the rehearsal of the editing before the actual execution of the edit. The segment you wish to edit is not recorded on the tape.

•Proceed to next step if this operation is unnecessary.



❶ Press the PREVIEW key.

The PREVIEW lamp will light up and preview will start.

•When preview is executed during the automatic continuity editing mode, press the PREVIEW key while holding down the Auto key in step ❶

❷ When preview has finished, the PREVIEW lamp will go out.

❸ Press the EDIT STOP key if you want to stop preview halfway.

Notes

•If the edit out point has not been entered when the EDIT STOP key is pressed, the edit out point will be entered automatically.

•To cancel the preview during the automatic continuity editing mode, press the Edit Stop key twice.

When Performing Preview

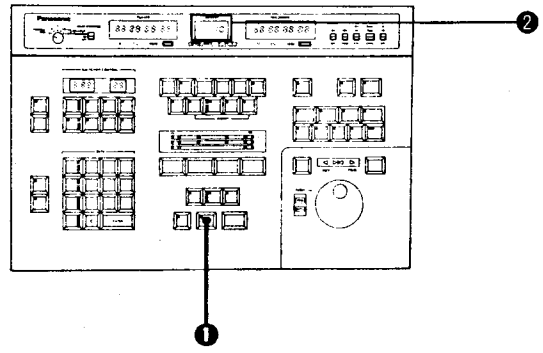
To produce the available effects either the optional AG-SW800 or the AG-RM800 are connected. Then enter the edit points and the data for the effects at the time of executing preview.

Refer to page 40 to produce the effects when the AG-SW800 is connected.

Refer to page 52 to produce the effects when the AG-RM800 is connected.

5. To Start Editing

After preview is completed, start editing the event whose number is shown on the EVENT NO. Display.



❶ Press the EDIT key.
The EDIT lamp will light up and the edit will start.

The EDIT lamp will go out once editing of the event has been completed.

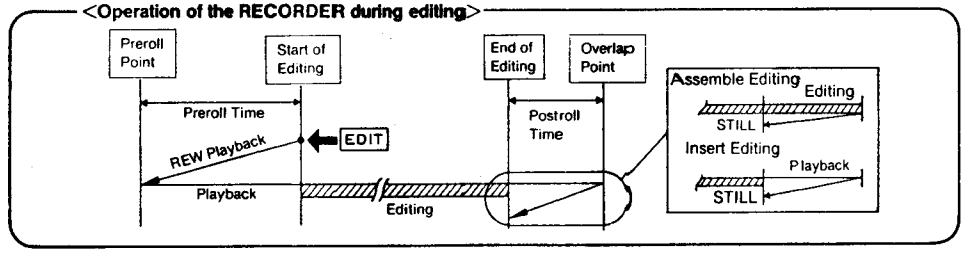
❷ The next event number that has been entered will be displayed at the end of editing.

Notes

•Press the EDIT STOP key to stop the editing halfway. If the edit OUT point has not been entered, the current position of the tape at which the EDIT STOP key is pressed will be entered as the edit OUT point.
If not desired, press the STOP key.

•The Recorder side IN point of the next EVENT will be automatically entered as the Recorder side OUT point of the EVENT.

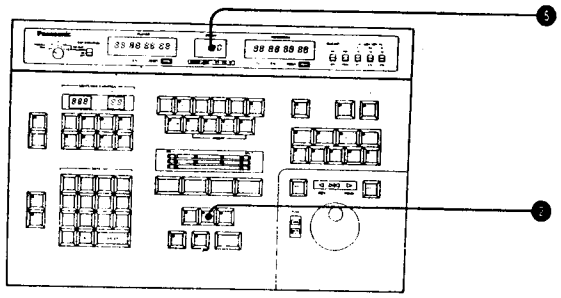
<Operation of the RECORDER during editing>



•The post roll time can be set with the DIP Switches.

6. Review

This function is used to playback after editing.



❶ Enter the event number to be checked.

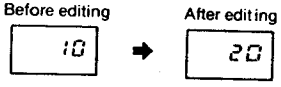
❷ Press the REVIEW key.

•To check the Automatic continuty editng, press the REVIEW key while holding down the AUTO key.

❸ The REVIEW lamp will light up and the REVIEW will start.

❹ When the REVIEW is finished, the REVIEW lamp will go out.

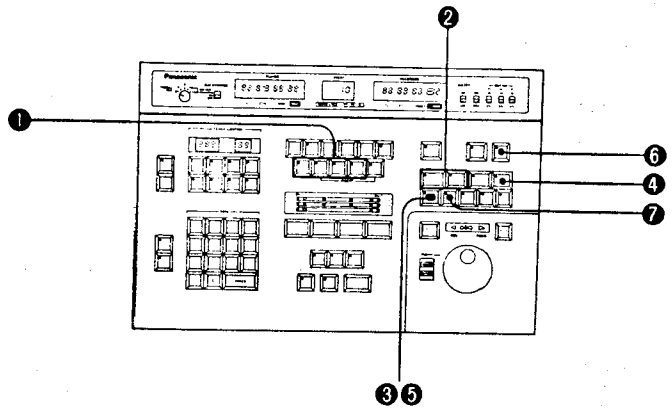
❺ The event number shown on the display will increase.



•When reviewing the EVENT which has not yet been completely edited, the EVENT preceding the current EVENT will be reviewed. It can not be executed to review an event which has not been edited before.

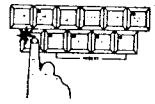
Manual Editing (On-The Fly-Editing)

This procedure allows you to execute and edit manually even when the edit point has not been entered.
Note that the edit point will not be registered.

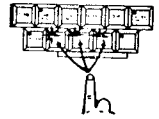


❶ Set the editing mode.

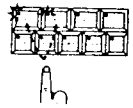
•Assemble editing



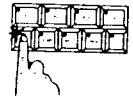
• Insert editing



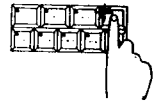
❷ Select the PLAYER to execute the edit.



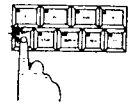
❸ Press the PLAY key on the PLAYER to start playback. (Monitor the video playback on the TV)



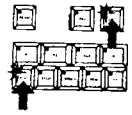
❹ Select the RECORDER.



❺ Press the PLAY key on the RECORDER to start playback. (Monitor the video playback on the TV)

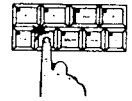


❻ Press the EDIT key while holding down the PLAY key at the desired position while monitoring the picture.



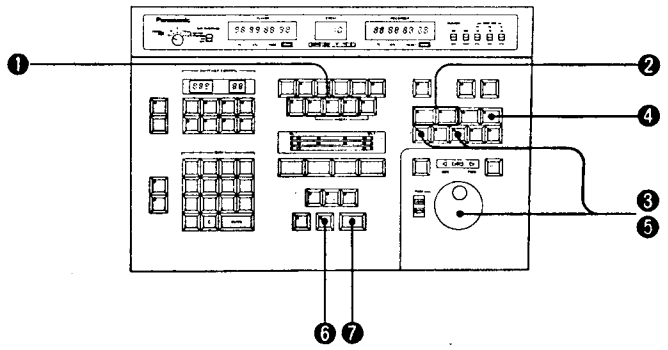
Note
No edit points are entered.

❼ Stop the edit by pressing the STOP key at the desired position while monitoring the playback picture.



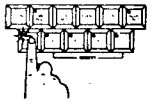
Simple Editing

This unit allows the execution of a manual edit when the edit points have not been entered.
In still playback, on the PLAYER and RECORDER, set the points which will be the IN points. When the EDIT key is pressed, the current position of the tapes will automatically be entered as the IN points and the editing will start.
When the EDIT STOP key is pressed, the current positions of the tape will be entered as the OUT points and the editing will stop.

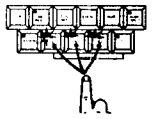


❶ Set the editing mode.

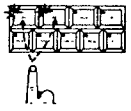
•Assemble editing



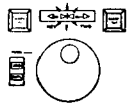
•Insert editing



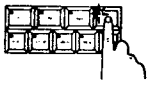
❷ Select the PLAYER.



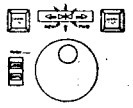
❸ Start playback on the PLAYER and search for the position at which the editing will start and then set the PLAYER to still playback.



❹ Select the RECORDER.

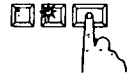


❺ Start playback on the RECORDER and search for the position at which the editing will start and then set the RECORDER to still playback.

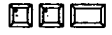


❻ Press the EDIT key to start the edit. The EDIT lamp will light up and the IN points will automatically be entered.

❼ Stop the edit by pressing the EDIT STOP key at the desired point while monitoring the picture.
When the EDIT STOP key is pressed, the OUT points will be entered automatically.
If not desired, press the STOP key.

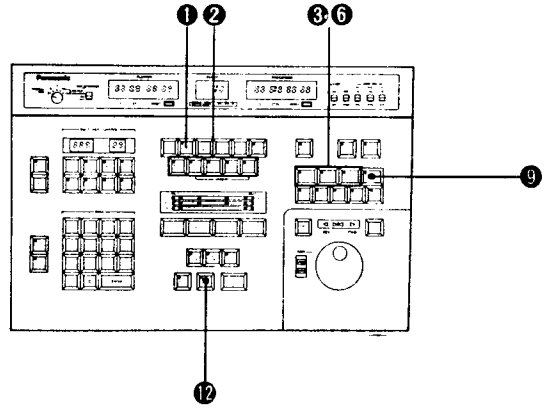


❽ The EDIT lamp will go out and the edit will stop.

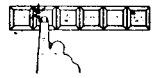


Editing using Two PLAYERs (A/B Roll Editing) — with the switcher

This unit allows the execution of editing with two players, i.e., the ability to perform A/B Roll edits.
Connect the two PLAYERs and RECORDER to this unit and use the optional Switcher (AG-SW800). Refer to page 12 for further details.



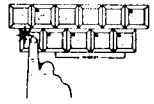
❶ Press the A/B ROLL key. The A/B roll editing mode will be set after the lamp lights up.



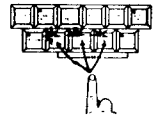
•To cancel this mode, press the A/B ROLL key again. The lamp will go off.

❷ Select the editing mode.

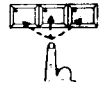
•Assemble editing



•Insert editing



❸ Select the VTR on the player side on which the A roll will be used.

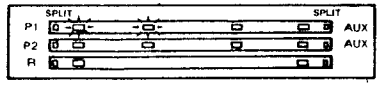


•The VTR that has been first selected will always be the A roll side.
The VTR for the B roll side cannot be selected until the one for the A roll side has been selected.

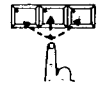
❹ Enter the edit points on the A roll.
There are three ways to enter these points. These are using the Mark IN and OUT, numerics, or + and − keys. Refer to page 21.

❺ The edit point lamps will light up as shown in the figure below when the points are entered on the A roll.

When the P1 VTR is the A roll side.



❻ Select another VTR on the player side that will be the B roll side and press the keys.



❼ Enter the edit points on the B roll.
There are three ways to enter the edit points. These are using the Mark IN and OUT, numerics, or + and − keys. Refer to page 21.

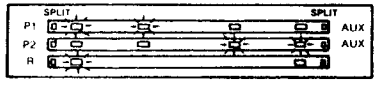
❽ The edit point lamps will light up as shown in the figure below when the points are entered on the B roll.

When the P2 VTR is the B roll side.

❾ Press the R key.

❿ Enter the edit points on the recorder VTR side.
It is only necessary enter one of the points, IN or OUT, as the other will be automatically calculated.
- There are three ways to enter the points. These are using the Mark IN and OUT, numerics, or + and − keys. Refer to page 21.

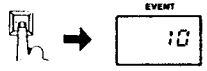
⓫ After the points have been entered, the edit point lamps will light up as shown in the figure below.



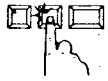
- For the Audio Split Editing
  Refer to page 37.
- For the Special Effect Editing
  Refer to pages 40 to 49.

⓬ Starting the editing.

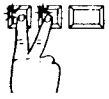
When making an edit with a cut.
Set the event on which will start the edit.



Press the Edit key.
The edit lamp will light up and edit will start.

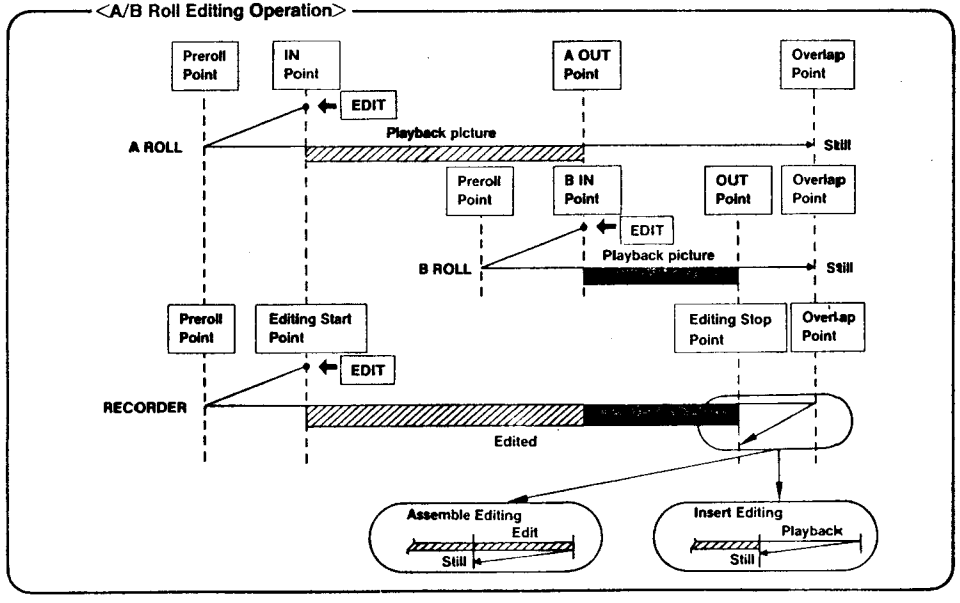


When the automatic continuity editing is executed.
Press the EDIT key while holding down the AUTO key.
The AUTO and EDIT lamps will light up and the edit with plural cuts will be made. Refer to page 34.



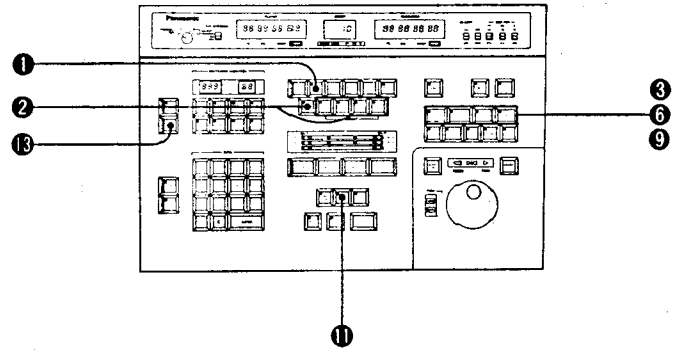
- To stop the editing operation in progress, press the EDIT STOP key.
- To stop the automatic continuity editing operation in progress, press the EDIT STOP key twice.
- If the OUT point has not been entered, it will be entered on the section of the tape when you press the EDIT STOP key. Press the STOP key if not desired.

<A/B Roll Editing Operation>

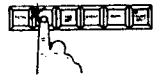


Manual TAKE Editing (SYNC ROLL) — with the Switcher

This mode is used to operate the switcher manually after starting two VTRs sim ultaneously and making an edit on the recorder VTR side. Refer to page 12 for information on the connections.

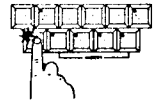
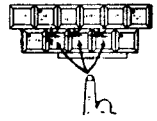


❶ Press the A/B ROLL key.
The A/B roll editing mode will be set after the lamp lights up.

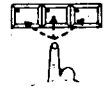


- To cancel this mode, press the A/B ROLL key again. The lamp will go off.

❷ Select the editing mode.
- Assemble editing
- Insert editing

❸ Select the VTR on the player side that will be the A roll side and press the key.

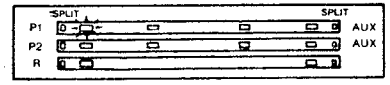


- The VTR on the player side that has first been selected will be the A roll side and remember that the VTR for the B roll side cannot be selected until the A roll side has been selected.

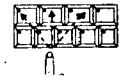
❹ Enter the edit IN point on the A roll.
There are two ways of entering this point, i.e., with the Mark IN and the numeric keys. Refer to page 21.

❺ The edit IN point lamp will light up after the point is entered on the A roll.

If the A roll side is the P1 VTR.



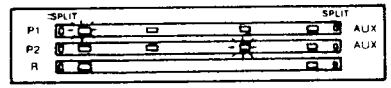
❻ Select another player that will be the B roll side.



❼ Enter the edit IN point on the B roll.
There are two ways of entering the IN point, i.e., with the Mark IN and the numeric keys. Refer to page 21.

❽ The edit IN point lamp will light up as shown in the figure below after the point has been entered on the B roll.

If the B roll side is the P2 VTR.

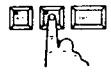


❾ Press the R key.

❿ Enter the edit points on the recorder VTR side.
It is not necessary to enter the edit IN and OUT points on the recorder VTR side.
- If the IN point has not been entered, the tape position where the Edit key is pressed will be entered as the IN point.
- If the OUT point has not been entered, the tape position where the EDIT STOP key is pressed will be entered as the OUT point.

Press the STOP key if not desired.

⓫ Press the Edit key.



⓬ The edit lamp will light up and edit will start.

⓭ Use the switcher to switch from the A roll VTR to the B roll VTR. Refer to page 51.
- To stop the edit in progress, press the Edit Stop key. (Press the STOP key if not entering the OUT point.)

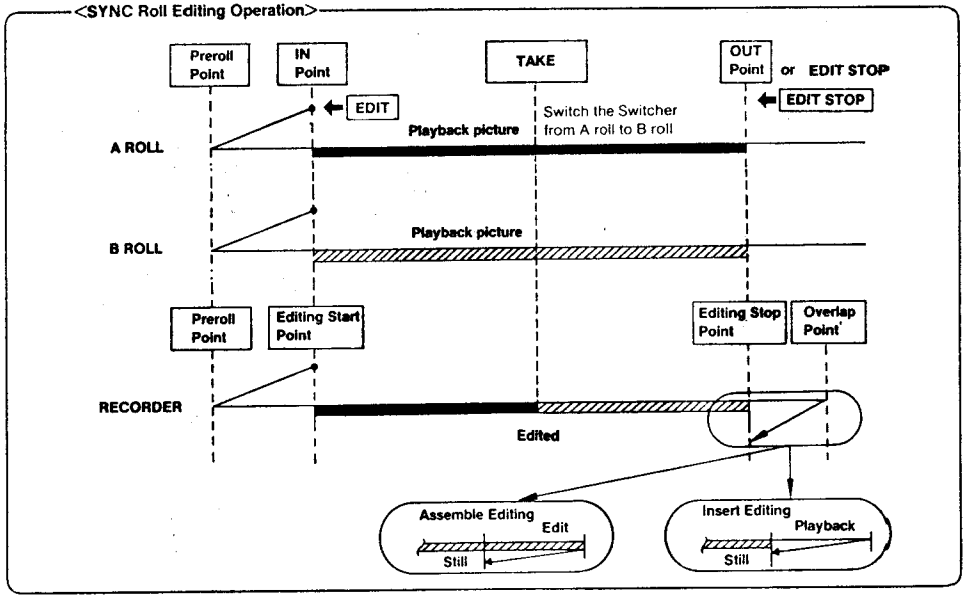
How to Operate the Switcher

(1) Using the Take key on the controller. Refer to page 51.
- The Take key can only be used when the AG-SW800 is connected.
- The key can only be operated once for each event and the switcher cannot be switched again with the TAKE key even if this key is pressed several times.

(2) Using the AG-SW800. Refer to the Operating Instructions of this switcher.

(3) Using the AG-RM800. Refer to page 52.
You can use this switcher with the AG-RM800 fader if the AG-RM800 is connected to the AG-SW800.

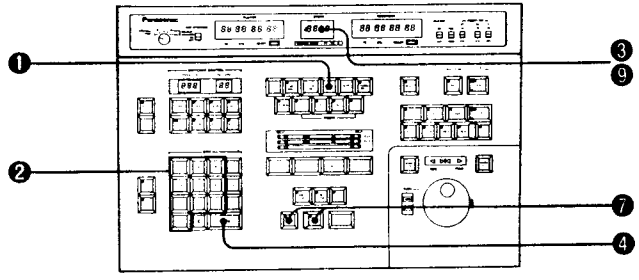
<SYNC Roll Editing Operation>



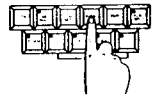
Note
Since the A/B point is entered automatically when the TAKE key is pressed in the AUTO ON mode (see page 51), A/B roll editing is conducted when the Edit key is pressed again. When attempting sync-roll editing any number of times, proceed from the start in the AUTO OFF mode. (However, the A/B point will not be entered on EDL.)

Automatic Continuity Editing

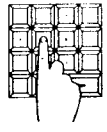
You can perform continuity editing of plural events automatically in accordance with the edit data you have entered beforehand on this equipment. Up to 128 individual data items can be entered, the maximum number of edit times will depend on the data for A/B, audio split and/or effect editing.



❶ Press the EVENT key.

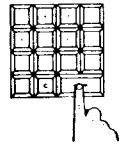


❷ Type the event number using the 10 key Numeric Pad.



❸ The event number typed with the 10 key Numeric Pad will be displayed.

❹ Press the ENTER key.



Note
When the unit is turned on, event number "10" is shown on the display.

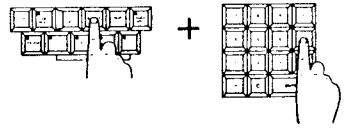
❺ Enter the edit data.
Enter the data, including the data for basic, A/B roll, audio split editing and effect editing.

❻ Enter the edit data for the events to be edited automatically and continuously by following the procedure above.

Note
The Recorder side IN point of the next EVENT will be automatically entered as the Recorder side OUT point of the previous EVENT.

•Apart from steps ❶–❻, there are other methods to specify the number of events as shown below.

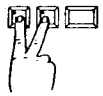
(1) Press the + key while holding down the Event key. Make sure that the current edit data has been entered.



(2) After pressing these keys, multiples of ten will be displayed in progression. If the current event number is, say 15, the number which will be displayed will be 20. If it is 31, the multiple of ten will be 40.

Notes
- If the edit points for the event have not been entered, the event number can not be specified with the + key.
- The usable event numbers are 1 to 9899.

❼ Press the Edit key while holding down the Auto key.

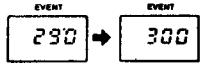


•Automatic continuity editing cannot be performed if all the necessary edit points are not entered correctly.

❽ The Auto and Edit lamps will light up and the automatic continuity editing will start.

Note
•If the edit data list is changed after entering the data, be sure to modify the edit data list (Refer to page 64).

❾ After the edit, the event numbers will be increased.



❿ The Auto and Edit lamps will go off after the last edit.

To stop the execution of an automatic continuity editing progress.
•To stop the automatic continuity editing after editing the event whose number is displayed, press the Edit Stop key once.
•To stop it immediately, press the Edit Stop key twice.

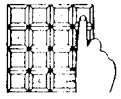
Specifying the Range of the Edit

Automatic continuity editing of events can be performed with multiple cuts within a specified range. For example, if the edit data for the execution of 20 cuts within event numbers 10 to 200 have been entered, you will be able to edit within event numbers 100 to 150 automatically and continuously.
Follow the procedure below after step ❻.

(1) Press the Event key.

(2) Input the desired event number with the numeric keys from which the editing will start.
(If you not input this event number, it will be automaticaly entered as the minimum event number.)

(3) Press the automatic continuity Edit key (–).



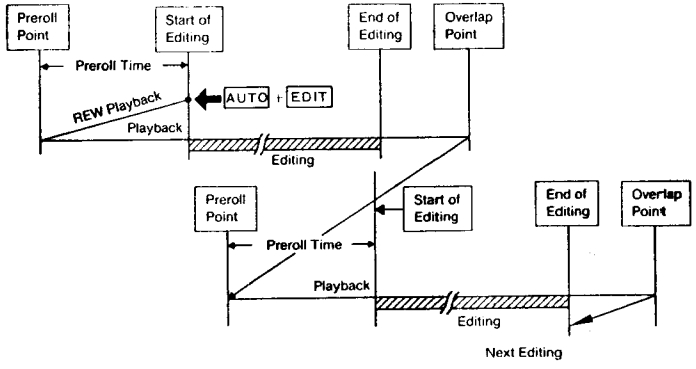
(4) Input the number of the last event to be edited on the numeric keyboard.
(If this last event number is not entered, it will be automatically entered as the maximum event number.)

(5) Press the Enter key.

(6) Press the Edit key while holding down the Auto key.
The automatic continuity editing will be performed within the range specified.

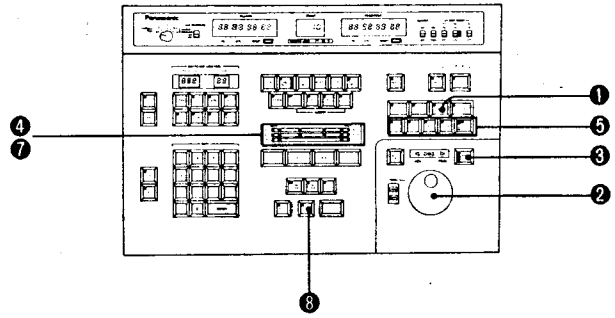
•Refer to page 60 and 62 to check or cancel the range of automatic continuity editing.
•If the data has been deleted for the editing of all the events, the range will also be deleted.

<Operation of the RECORDER during continuous automatic editing>



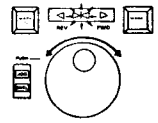
•The post roll time can be set with the DIP switches.

Editing Signals from an External Unit (AUX) — with the switcher



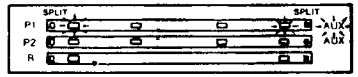
❶ Press the AUX key.

❷ Enter the OUT point using the Search Dial.

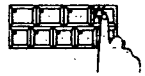


❸ Press the Mark OUT key.

❹ The IN and OUT lamps on the external unit (AUX) and AUX lamp will light up.

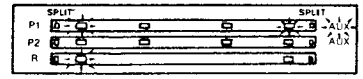


❺ Press the R key.

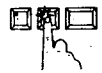


❻ Enter the edit points on the recorder VTR side.
Only enter one edit point (IN or OUT) on the recorder VTR side. The other will be calculated automatically.
There are three ways to enter the points: with the Mark IN and OUT, numerics, or + and – keys. Refer to page 21.

❼ The edit point lamps will light up as shown in the figure below after the edit points have been entered.



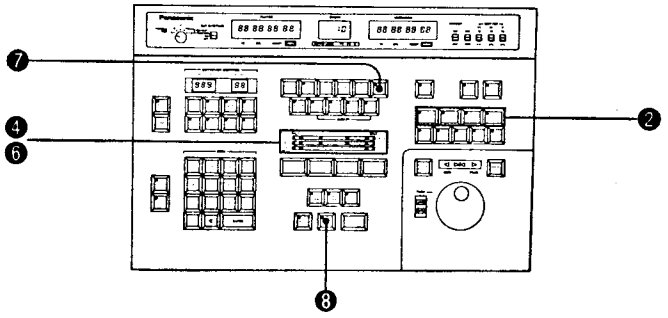
❽ Press the Edit key to edit the signal from the external equipment.



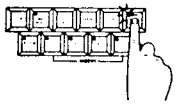
Notes
•The numeric keys can also be used to set the points on the auxiliary equipment.
•The IN point of the tape on the auxiliary equipment (external side) is always "00:00:00:00".
•Only enter the IN point on the auxiliary equipment after you have entered the IN and OUT edit points on the recorder VTR side.
•For the AUX lamp, refer to page 58.

Audio Split Editing

The Audio split edit is one in which the Video and Audio material have different entry or exit points in the same edit.

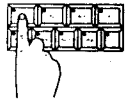


❶ Set the audio split editing mode by pressing the AUDIO SPLIT key. The corresponding lamp will light up.



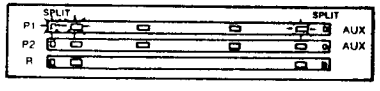
•To cancel this mode, press this key again. The lamp will go out.

❷ Press the P1, P2 or R key.



❸ Enter the audio split edit IN points. There are two ways to enter the edit points: with the Mark IN or the numeric keys (refer to page 21).

❹ The AUDIO IN point will be entered after the key is pressed. The SPLIT lamp will light up on the PLAYER or RECORDER.



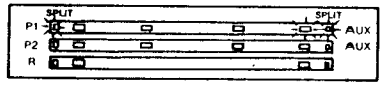
•When the A/B roll editing is in the Insert mode. Enter the A/B point which is the out point of the A roll or the IN point of the B roll.

Notes

- •Enter the audio points on the PLAYER or RECORDER after all the edit points for video have been entered.
- •Entry of the Audio IN (or OUT) point on the RECORDER side cannot be available if Audio IN (or OUT) point has been entered on the PLAYER side.
- •Only enter the IN and OUT points. The video and audio signals will be edited at the same edit points that have not been entered simultaneously.
- •Refer to page 58, 59.

❺ Enter the audio split edit OUT point. This point can be entered with the Mark OUT, the numeric keys or + and − keys (refer to page 21).

❻ The SPLIT lamp on the selected VTR on the player or recorder side will light up and the audio split OUT point will be entered. Now this point has been entered.



•With A/B roll mode, enter the effect data, refer to page 50.

❼ Exit the audio split entry mode with the AUDIO SPLIT key. The Split lamp will go off and the normal edit point entry mode will be set.

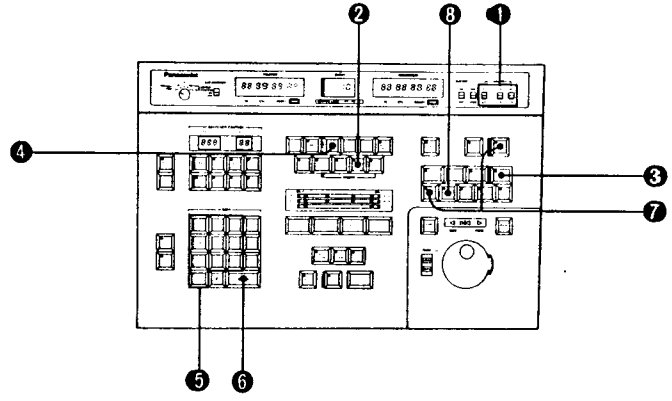
❽ Start the audio split editing with the Edit key.

Refer to the table below for information on how to enter the audio split points during normal or A/B roll editing.

Normal editing	Insert mode	Enter the following two points: one of the IN points of the players 1 and 2 and recorder, one of the OUT points of the players 1 and 2 and recorder.
	Assembly mode	Audio split editing can not be performed.
A/B roll editing	Insert mode	Enter the following two points: one of the IN points of the A roll and recorder, one of the OUT points of the B roll and recorder, and the OUT point of the A roll or IN point of the B roll.
	Assembly mode	Only enter the OUT point of the A roll or the IN point of the B roll.

Time Code Signal — (TCG-set and insert)

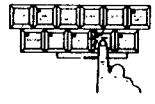
The time code generator and reader are built on an optional 34-Pin Interface Board. The time code signal with 9P I/F board will perform the input and output of the regenerated signal through the 9-Pin cable. The unit can execute editing by recording the time code signal recorded on the RECORDER tape.



Time code generator setting

❶ Set the EDIT REF Selector Switch to the "TC" position.

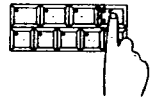
❷ Press the A2 (Audio CH2) or TC key. The lamp will light up.



Note

- •The button to be pressed in step ❷ differs depending on the type of VTR used. For S-VHS or VHS, press the A2 key. For MII Series models, press the TC key.

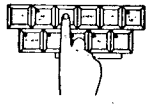
❸ Press the R key.



Note

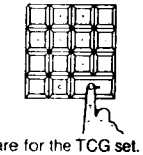
- •If you use 9 Pin interface board, there will be a VTR that cannot set the time code.

❹ Press the TCG SET key.



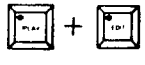
❺ Input the value of the time code signal.

❻ Press the ENTER key.

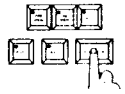


•Step ❸ to ❺ are for the TCG set.

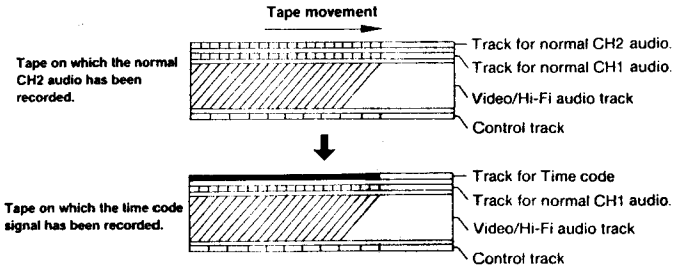
❼ Press the PLAY key and the EDIT key at the same time. The time code signal will be recorded on the RECORDER tape.



❾ Press the STOP key once the time code signal has been recorded.



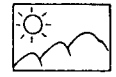
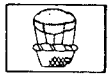
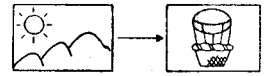
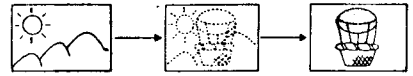
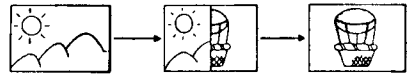
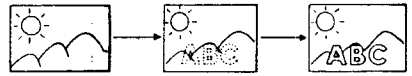
Note:
When time code editing is executed on S-VHS or VHS tapes, the normal CH2 audio signal can not be recorded because the time code (TC) signal will be recorded on the track for the normal audio of CH2.


Tape movement
Tape on which the normal CH2 audio has been recorded.
Track for normal CH2 audio.
Track for normal CH1 audio.
Video/Hi-Fi audio track
Control track
Tape on which the time code signal has been recorded.
Track for Time code
Track for normal CH1 audio.
Video/Hi-Fi audio track
Control track

Notes
- The time code will jam to the current time code on the recorded tape in the normal edit.
- If there is a necessity to record a purpose time code, use the above method.
  Refer to page 19 (Initial Editing).

Special Effects when the AG-SW800 is Connected

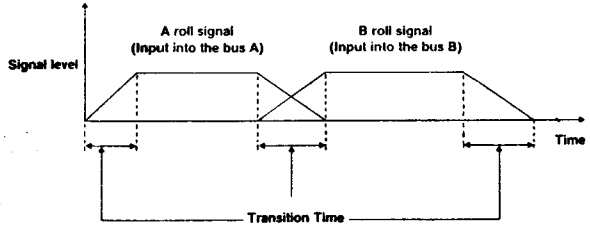
Editing using the special effects described below can be done when the Audio/Video Switcher AG-SW800 is connected to the controller AG-A800.
- Only one special effect can be produced for each event.

INPUT VIDEO PICTURE  Input on the bus A  Input on the bus B KEY input	
Modes Using Special Effects When the AG-SW800 is Connected	Special Video Effects
1. Cut Mode Effect used for instantaneous switches from video pictures to others.	Instantaneous switch from the bus A video picture to the bus B video picture. 
2. Fade In Mode The video picture gradually fade in from a black or white screen.	The bus A video picture gradually fades in.
3. Fade Out Mode The video picture gradually fade out a black or white picture.	The bus A video picture gradually fades out.
4. Dissolve Mode Effect produced by fading out a video picture while fading in another.	The bus A video picture fades out and the bus B video picture fades in. 
5. Wipe Mode Parts of different video pictures are blended in wipe patterns.	Vertical wipe/line-split pattern of the bus A video picture into the bus B video picture. 
6. Down Stream Keyer Used to superimpose characters or patterns (foreground) onto other video pictures (background).	Superimposing the key video picture onto the bus A video picture. 

- The Key input signal is the video signal generated by the external character generator or the B/W video camera.

Transition Time

This Editing Controller can be used to set the duration time of the special effects from their beginning until their completion. This is called the transition time and is set in frame units (1 frame equals 1/25 seconds) up to 999 frames or 40 seconds.



Note
If frame 0 is set as the transition time, the cut effect is produced.

Wipe Patterns

You can select 16 different wipe patterns by entering the corresponding pattern number on this Editing Controller. The eight normal wipe patterns have corresponding reverse patterns (see table below) and the picture replace the black areas to white areas in the table below.

Pattern No.	Direction	Pattern name	Pattern No.	Direction	Pattern name
1	Normal	Vertical wipe	51	Reverse	Vertical wipe
2	Normal	Horizontal wipe	52	Reverse	Horizontal wipe
3	Normal	Vertical split wipe	53	Reverse	Vertical split wipe
4	Normal	Horizontal split wipe	54	Reverse	Horizontal split wipe
5	Normal	Left corner wipe	55	Reverse	Left corner wipe
6	Normal	Right corner wipe	56	Reverse	Right corner wipe
7	Normal	Diagonal wipe	57	Reverse	Diagonal wipe
8	Normal	Circle wipe	58	Reverse	Circle wipe

Fade IN/OUT

When the Dissolve fade mode has been selected, the special effects with black or white signal can be provided for fade IN or OUT. This can be specified by a dissolve number from the editing controller.

Effect Point / Pattern No.	P IN	P OUT
0	Fading in from a black screen	Fading out into a black screen
1	Fading in from a white screen	Fading out into a white screen

Note
- The AG-A800 does not contain the Fade key, therefore use the Dissolve key.

Basic Operation when the AG-SW800 is Connected

Preparation

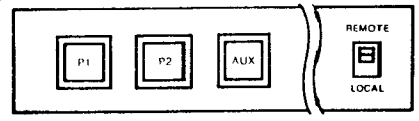
(1) Make the connections in the system.

(2) Turn on the switcher.

(3) Turn on the editing controller.
The power indicator on the editing controller will light up.

(4) Make the necessary adjustments in the system. Refer to the Operating Instructions of the AG-SW800 and TBC.

(5) Set the control switch on the AG-SW800 to the "REMOTE" position. The P1, P2 and AUX lamps will go off.



Editing Operation

You can make edits using special effects, including A/B roll editing with 2 VTRs and sync-roll editing when the AG-SW800 is connected.

1) Basic Editing in the A/B roll

The flow chart of the basic editing operation using special effects in the A/B roll editing mode is as follows:

Enter the necessary edit points for the A/B roll editing.
- Make the edit with special effects after entering the edit point.

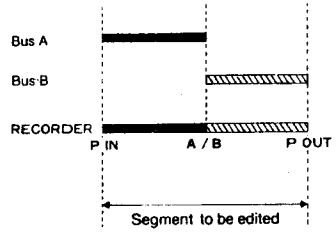
..... Refer to page 30.

Select the effect points (see below).

Select the P IN, A/B or P OUT point.

Only one special effect can be produced for each point.

- Explanation of the Effect Points



P IN: The point from which the edit will start.
A/B: The point where the bus switches from the A to the B roll.
P OUT: The point where the edit ends.

Select the kind of the special effect you want to produce.
DIS key: To produce the fade-in effect at the P IN point and fade-out effect at the P OUT point and produce the dissolve effect from the A roll into the B roll. ..... Refer to page 46.
WIPE key: To produce the wipe effect from the A roll into the B roll. This effect cannot be executed at the P IN or P OUT point. ..... Refer to page 47.

Select the pattern of the special effect.
DIS key: Two patterns can be selected: the effect produced from a black screen (0) or white screen (1). This effect can not be produced from the A roll to the B roll. ..... Refer to page 41, 46.
WIPE key: Sixteen patterns can be selected. Patterns 1~8 (normal) and 51~58 (reverse). ..... Refer to page 41, 47.
Select the pattern as desired by typing the pattern number on the numeric keyboard and then press the Enter key.

Set the transition time.
Press the TRAN key to set the transition time (0~999) with the numeric keyboard and then press the Enter key.

Repeat from first step and enter all points of P IN, A/B and P OUT.

The setting is finished.

The editing operation starts.

Special effects are produced automatically during edits.

•Refer to page 48 if you wish to produce the Down Stream keyer effect.
•Refer to page 50 if you wish to produce the special audio effect.

2) SYNC Roll Editing

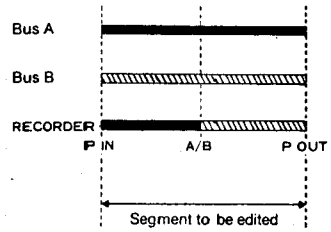
The flow chart of basic editing using special effects in the sync-roll editing mode is as follows:

Enter the edit points to execute sync-roll editing.
•Make the edit using special effects only after entering the edit points. ..... Refer to page 20, 32.

Select the points in which the effects will be produced (see below).

Select P IN or A/B.
•Special effects cannot be selected at the P OUT point during sync-roll editing.

Explanation of the Effect Points



P IN: The start point of the editing.
A/B: The bus will switch from the A roll to the B roll manually with the TAKE key.
P OUT: The point set when the Edit Stop key is pressed.

Select the kind of special effect.
DIS key: Produces the fade in effect at the P IN point and the dissolve effect from the A roll to the B roll. ..... Refer to page 46.
WIPE key: Produces the wipe effect from the A roll to the B roll. It cannot be produced at the P IN point. ..... Refer to page 47.

Select the pattern of the special effect.
DIS key: Two patterns can be selected: the effect produced from a black screen (0) or white screen (1). This effect cannot be produced from the A roll to the B roll. ..... Refer to page 41, 46.
WIPE key: Sixteen patterns can be selected. Patterns 1~8 (normal) and 51~58 (reverse). ..... Refer to page 41, 47.

Select the pattern as desired by typing the pattern number on the numeric keyboard and then press the Enter key.

Set the transition time.
Press the TRAN key to set the transition time (0~999) with the numeric keyboard. Then press the Enter key.

Repeat from first step and enter both points of P IN and A/B

The setting is finished.

Set the automatic mode with the Auto key.
AUTO ON: The Take key can be used to switch the switcher. The edit point will be set when the Take key is pressed.
AUTO OFF: The switcher can be switched using the Take key. The edit points cannot be entered.

..... Refer to page 51.

The editing starts.

The editing will start from the bus A. If the fade-in effect has been selected for the P IN point, the effect will be produced on the bus A.

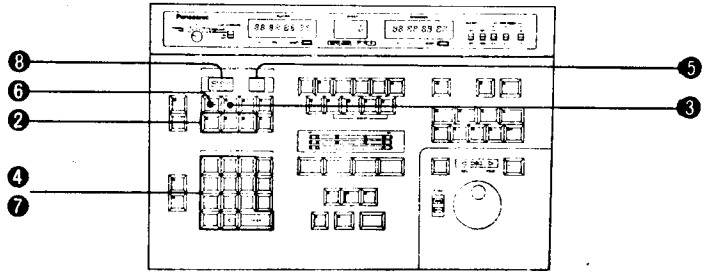
Press the Take key on the AG-A800 at the desired point.
If the special effect has been selected for the A/B point, the effect will be produced from bus A to bus B.

Press the Edit Stop key to stop the editing.
The editing operation will stop and the OUT point will be entered.

•Refer to page 48 if you wish to produce the Down Stream keyer effect.
•Refer to page 50 if you wish to produce the special audio effect.

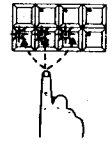
Using the Dissolve Effect (DIS) — with the Switcher

The dissolve at P IN point will be the fade-in effect from the black or white v deo picture.
The dissolve at P OUT point will be the fade-out effect into the black or white video picture.
The dissolve at A/B point will be the dissolve effect from the A roll video picture into the B roll video picture.

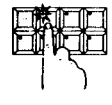


❶ Enter all the edit points
Refer to page 20, 30, 32 for the procedure of entering edit points.

❷ Select the desired points in which you wish to produce the special effects.

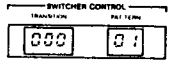


❸ Press the DIS key.

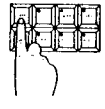


❹ Type the number of the desired dissolve pattern on the numeric keyboard for the P IN and P OUT points.
0: Fading in from a black screen (fading out into a black screen).
1: Fading in from a white screen (fading out into a white screen).
•A dissolve pattern does not have to be set if the A/B key has been selected in step ❷.

❺ Press the Enter key.
The selected dissolve pattern will appear on the pattern display.

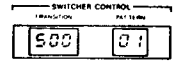


❻ Press the TRAN key.



❼ Input the transition time using the numeric keyboard.
•The transition time is set in frame units from 0 to 999 (1 frame=1/25 seconds).

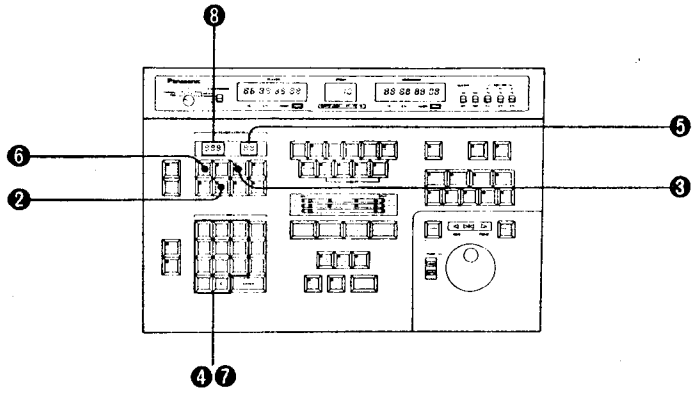
❽ Press the Enter key.
The transition time will appear on the pattern display.
The dissolve effect is produced.



Notes
•If you wish to choose another pattern or modify the transition time, input the desired pattern number or transition time by pressing the DIS or TRAN key and then press the Enter key.
•If frame 0 is set as the transition time, the cut effect will be produced.

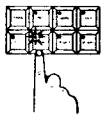
Using the Wipe Effect — with the Switcher

The wipe effect can only be produced at A/B point.

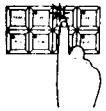


❶ Enter all the edit points.
Refer to the edit point entry procedure on page 20, 30, 32.

❷ Press the A/B key.



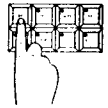
❸ Press the Wipe key.



❹ Type the number of the wipe pattern you desire on the numeric keyboard. Refer to page 41.

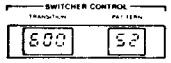
❺ Press the Enter key. The pattern number will appear on the pattern display.

❻ Press the TRAN key.



❼ Set the transition time using the numeric keyboard.
The transition time is set in frame units from 0 to 999 (1 freme=1/25 seconds).

❽ Press the Enter key.
The transition time will appear on the display.

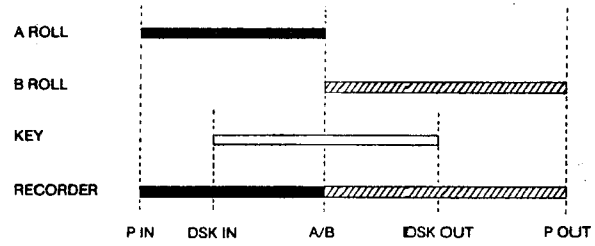


Notes

- If you wish to choose another pattern or modify the transition time, input the desired pattern number or transition time by pressing the WIPE or TRAN key and then press the Enter key.
- If frame 0 is set as the transition time, the cut effect will be produced.

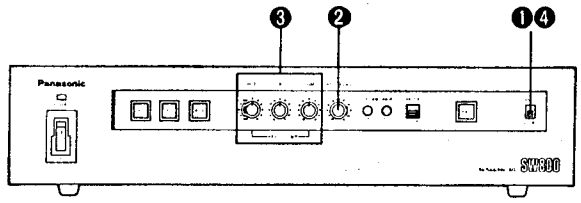
Setting the Down Stream Keyer Effect (DSK) — with the Switcher

The down stream keyer function allows you to adjust the chrominance of the characters generated by the character generator or the B/W video pictures from the video camera and then superimpose them on the editing segment.
To use this function, set the IN and OUT points and then produce the effect at these points.



1) Adjusting the Down Stream Keyer

You can adjust the hues of the chracters generated by the character generator or the luminace of the video picture from the video camera.



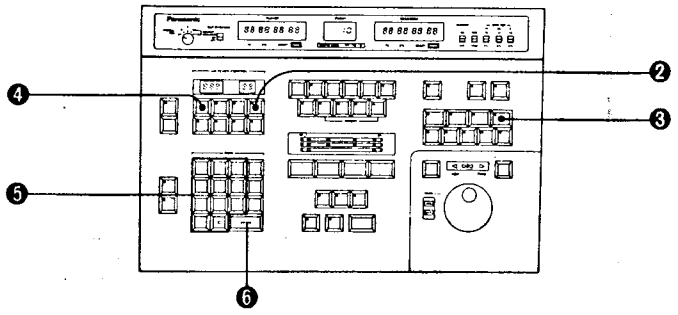
❶ Set the control switch to LOCAL.

❷ Adjust the video pictures with the KEY Input Level control.
Adjust the control so that the Key Input video signals (characters or pictures) will be displayed on the monitor. When rotated clockwise from its centre click-stop position, the white areas are inserted; when rotated counterclockwise, the black areas are inserted.

❸ Adjust the chrominance and brightness with the colour control.
HUE: To adjust the hue.
SAT: To adjust the colour saturation. If the control is turned clockwise, the saturation of the hues in the colour picture can be changed.
LUM: To adjust the brightness of the video picture. If the control is turned clockwise, the video picture will brighten.

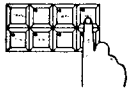
❹ Set the control switch to "REMOTE".
The above procedures can be performed on the AG-R M800 if it is connected.

2) Entering the Down Stream Keyer Edit Points



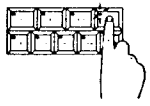
❶ Enter all the edit points.
Refer to page 20, 30 for the procedure of entering edit point.

❷ Press the KEY key.
The lamp will light up after this key is pressed.



❸ Enter the down stream keyer IN point where the effect will start and the OUT point where it will end.

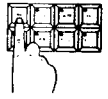
(1) Select the VTR on the recorder side.



(2) Enter the down stream keyer IN and OUT points. Enter the edit points using the numeric keys.

- The down stream keyer IN and OUT points cannot be entered as the edit points on the player VTR side. If you wish to enter these points while monitoring the video picture on the player VTR side, connect the AG-RM800 and set the effect memory function or use the MARK IN/OUT keys after the KEY key is pressed (KEY lamp light up) during the preview.
- Enter the down stream keyer IN and OUT points on the editing segment.

❹ Press the TRAN key.



❺ Set the transition time using the numeric keys.
- The transition times for the fade-in and fade-out effects are the same.

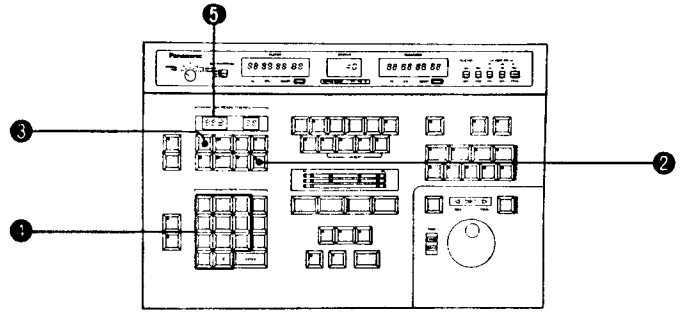
❻ Press the Enter key.
The transition time will be displayed.
- Steps ❹ to ❻ are unnecessary if the down stream keyer effect is executed with cuts.

Note
The following keys function as explained below are available while the KEY lamps are lit.

Key	FUNCTION
DUR	Displays the duration between the DSK IN and OUT points.
IN	Displays the DSK IN point on the display of the player VTR side.
OUT	Displays the DSK OUT point on the display of the player VTR side.
GOTO+IN	Cues up to the DSK IN point.
GOTO+OUT	Cues up to the DSK OUT point.
MARK IN	Enters the DSK IN point.
MARK OUT	Enters the DSK OUT point.

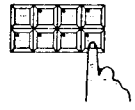
Producing the Special Audio Effect — with the Switcher

The editing controller AG-A800 allows you to produce the special audio effect independently from the video effects. The audio edit points are entered in the same way as the video points, but dissolve is the only possible audio effect.
The IN and OUT points will follow the fade of VIDEO effect.

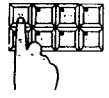


❶ Enter all the edit points.
Refer to the edit point entry procedure on page 20, 30.

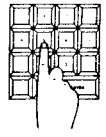
❷ Press the AUDIO key.
The AUDIO and A/B lamps will light up.



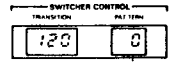
❸ Press the TRAN key.



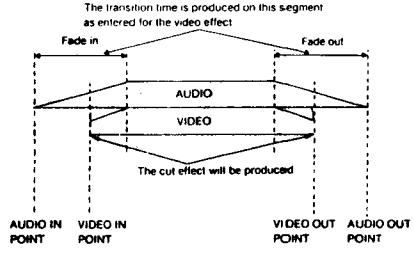
❹ Set the transition time with the numeric keys.
Set the transition time in frame units (0~999).

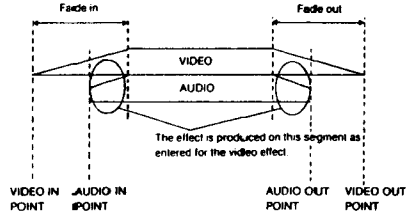


❺ Press the Enter key.
The transition time will be displayed.



Notes
- Noises may occur if the transition time is shorter than 3 frames.
- To enter the video effect, press the Audio key again. The lamp will go off.
- The special audio effect cannot be produced between the P IN and P OUT points. The effect will be produced as entered for the video effect. During audio split editing, the audio signals will be recorded as shown below.





AUTO Key/TAKE Key — with the Switcher

AUTO Key

The AUTO key switches the operations of the TAKE key when sync-roll editing is executed.
The AUTO and TAKE keys function in these modes as shown below.

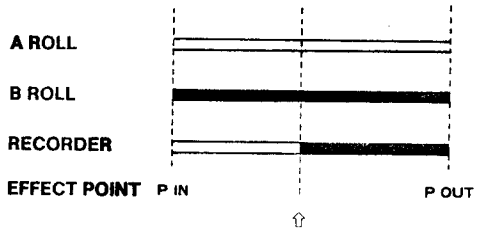
	AUTO ON	AUTO OFF
Sync-roll edit	The TAKE key is operative and pressed, the input from the switcher is switched and the points are entered as the A OUT and B IN points.	The TAKE key is operative and pressed, the input from the switcher is switched. However, the edit points are not entered.

Note
Since the A/B point is entered automatically when the TAKE key is pressed in the AUTO ON mode, A/B roll editing is conducted when the Edit key is pressed again. When attempting sync-roll editing any number of times, proceed from the start in the AUTO OFF mode. (However, the A/B point will not be entered on EDL.)

TAKE Key

The TAKE key allows you to switch from the A roll to the B roll during sync-roll.

Sync-roll editing



If the TAKE key is pressed, the switcher is switched. (The edit points are entered when the Auto key is set to ON.)

Notes
- The Take points of the video and the audio are the same.
- The Take key is operative during the preview mode and when pressed, the A OUT and B IN points are entered (only when the Auto key is set to ON during sync-roll editing).
- If the TAKE key is pressed during A/B roll mode, the switcher is switched from A to B before the A/B point but the B picture may be still.
- When using the effect memory on the A/B point with the AG-SW800 and AG-RM800, refer to page 53.

Special Effect when the AG-RM800 is Connected — with the Switcher

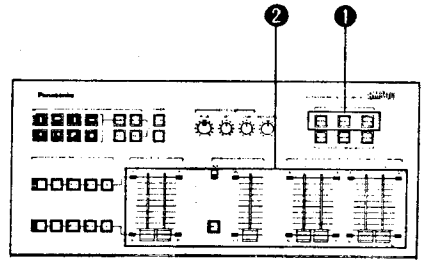
If the AG-SW800 (to which the audio/video switcher remote controller AG-RM800 is connected) and the AG-A800 are connected, the switcher selection of the bus A and bus B operated by the AG-RM800 fader manually, the operation of the special effects and performed on the AG-RM800 are memorized and reproduced during the editing. This is called the effect memory editing. (The AG-RM800 is not operative unless connected to the AG-SW800.)

Control Switch

You can switch between the AG-A800 and the AG-RM800 when controlling the editing operations on the AG-RM800 or AG-A800.

❶ Select the signal for manual control.

❷ Operate the fader.



AG-RM800

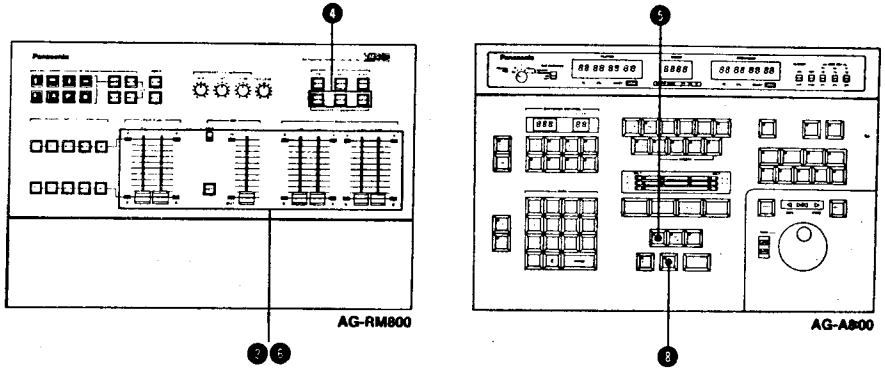
Notes
- If the fader lever is operated when the AG-SW800 is being controlled by the AG-A800, the automatic effect editing will stop operating and switch to manual operation by the AG-RM800. Therefore, only operate the fader lever when necessary.
- The relation between the status of the control selector switch and the units (AG-RM800, AG-A800) that remotely control the AG-SW800 are as follows:

AG-SW800 Control Selector Switch	AG-RM800 Control key/lamp			A, B bus Input Selection	Effect mode	Fader operation			
	VIDEO	KEY	AUDIO			VIDEO	KEY	AUDIO	AUDIO
LOCAL	○/●	○/●	○/●	See Note	×	×	×	×	×
REMOTE	○	○	○	◎	◎	▲	▲	▲	▲
	○	○	●	◎	◎	▲	▲	◎	▲
	○	●	○	◎	◎	▲	◎	▲	▲
	○	●	●	◎	◎	▲	◎	◎	▲
	●	○	○	◎	◎	◎	▲	▲	△
	●	○	●	◎	◎	◎	▲	◎	△
	●	●	○	◎	◎	◎	◎	▲	△
	●	●	●	◎	◎	◎	◎	◎	△

○ : Lamp lights up
● : Lamp goes off
× : Not operated
◎ : Remotely controlled by the AG-RM800 or AG-A800
△ : Remotely controlled by the AG-RM800 or AG-A800
(controlled in conjunction with the video when remotely controlled by the AG-A800)
▲ : Remotely controlled by the AG-RM800 only
Note : Operated by the AG-SW800 (only the bus A).

Effect Memory — with the switcher and AG-RM800

The effect memory allows the memorization of the point where operating the fader on the AG-RM800 began and the duration (from the start of operating the fader until the end of using it) on the AG-A800.
The effect memory can be entered in each event.



❶ Enter all the edit points (and set the sync-roll).
Refer to the entering procedure on page 21, 32, 51.

❷ The special effect mode can be set on the AG-A800 side.

❸ Set the fader with which the effect memory can be entered to bus A and turn off the lamp on bus B.
(Set it to the OUT position if you wish to use the down stream keyer fader.)

❹ Select the signal to enter the effect memory.

❺ Rehearse the edit by pressing the Preview key.

❻ Operate the fader to enter the effect memory. It will be automatically entered.

❼ The memory lamp will flash while the fader is in operation. When operation stops the lamp will go off. The operation is entered.

❽ After the preview, press the Edit key to make the actual edit.

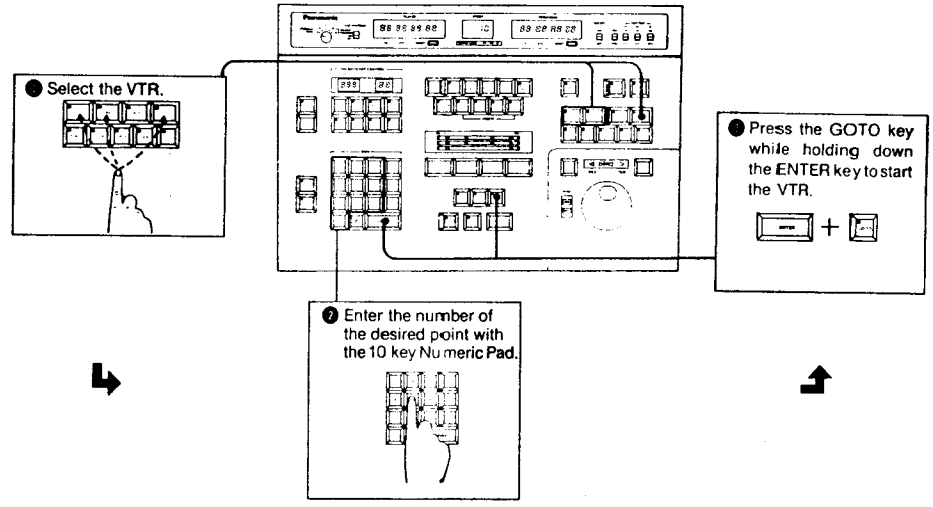
Notes
- The following are the faders to enter the effect memory.
  VIDEO: H/V fader (the V fader cannot be used.)
  DSK: Down stream keyer fader
  AUDIO: CH1 fader (CH2 is controlled in conjunction with the CH1 fader)
- The effect memory allows the memorizations of the operations of the Video, Key and Audio effects once for each of the events.
- Note that only the effect at the start point (A OUT) and the transition time can be entered if the fader is slid serveral times.
- To memorize the video or audio effect, memorize the sync-roll editing using the editing controller.
  If you already have been entered the A/B roll editing, the data cannot be rewritten using this function.
- When the down stream keyer effect memory is entered, the start point, the transition time and the end point can be set. When the fader is moved from IN to OUT and vice versa in step ❻, the points will be entered as the points between the down stream keyer effect. The transition times of the fade-in and fade-out effects are the same.
- The A/B roll editing cannot use this function.

Automatic Search (GO TO)

If you want to check a point quickly, press the GO TO key to cue up to that point.

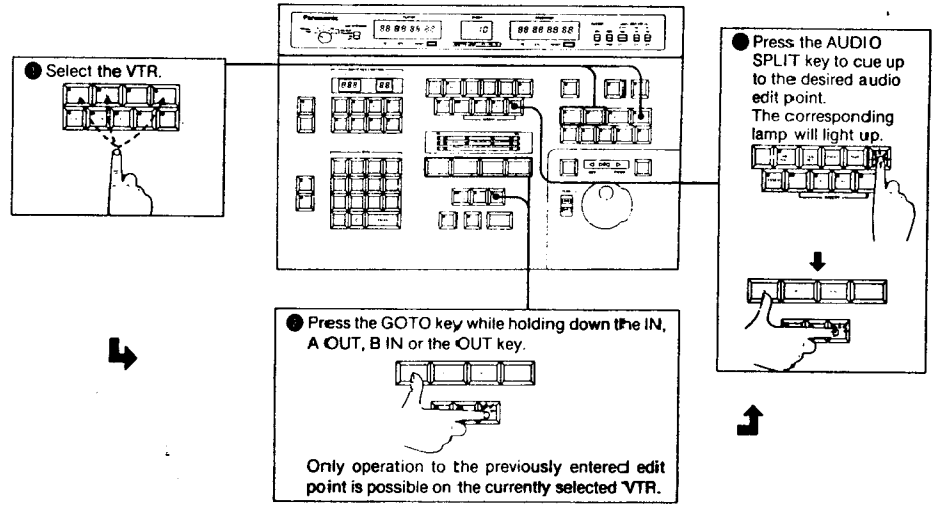
To Search for a Desired Point

To cue up to that point with the 10 key Numeric Pad, follow the steps below:


❶ Select the VTR.
❷ Enter the number of the desired point with the 10 key Numeric Pad.
❸ Press the GOTO key while holding down the ENTER key to start the VTR.

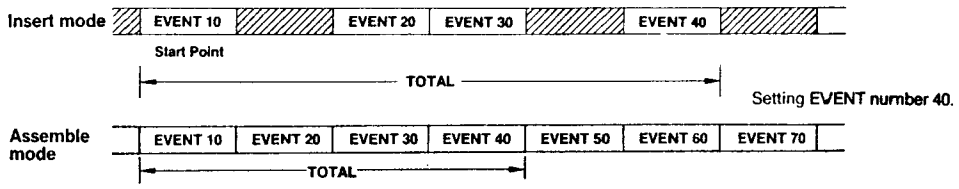
To Search Edit Points

The cue up to the edit points already entered, follow the steps below:

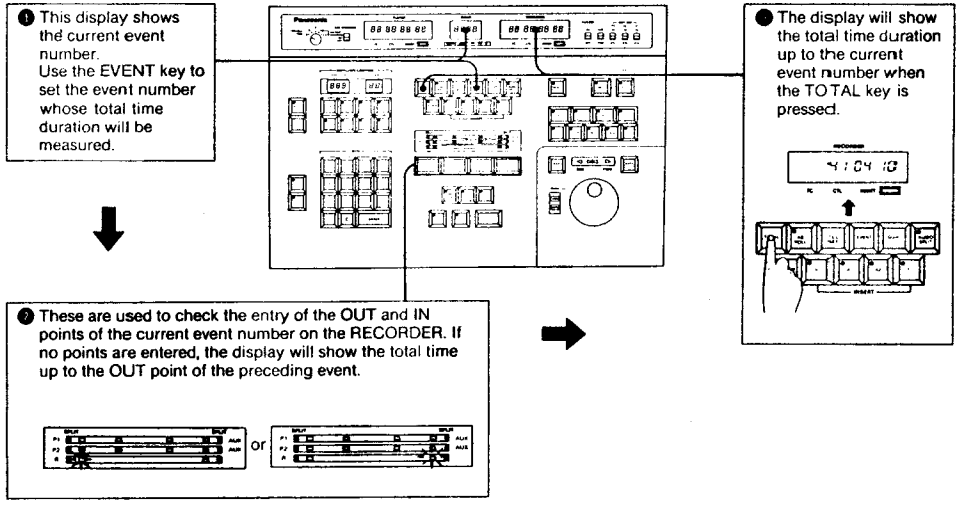

❶ Select the VTR.
❷ Press the GOTO key while holding down the IN, A OUT, B IN or the OUT key.
Only operation to the previously entered edit point is possible on the currently selected VTR.
❸ Press the AUDIO SPLIT key to cue up to the desired audio edit point.
The corresponding lamp will light up.

Total Time Display

The total time duration is measured from the IN point of the first event to the OUT point of the current event number and shown on the RECORDER display.
However, if the OUT point of the current event number has not been entered on the RECORDER, the display will show the total time duration up to the IN point. If the IN and OUT points have not been entered on the RECORDER, the display will show the total time duration up to the OUT point of the preceding event.

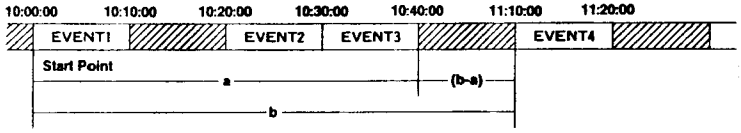


Checking the Total Time


❶ This display shows the current event number.
Use the EVENT key to set the event number whose total time duration will be measured.
❷ These are used to check the entry of the OUT and IN points of the current event number on the RECORDER. If no points are entered, the display will show the total time up to the OUT point of the preceding event.
or
● The display will show the total time duration up to the current event number when the TOTAL key is pressed.

<Example>

To set the start point "00 10 00 00" (the IN point of the first event on the RECORDER is "00 10 00 00").



- The total time duration calculated differs depending on whether the IN point of the EVENT 4 (show in above) has been entered on the RECORDER (b and a are shown in the diagram above).
- The total time will not be displayed if the start point has not been entered.
- The value displayed may not be correct if the button is pressed during editing.

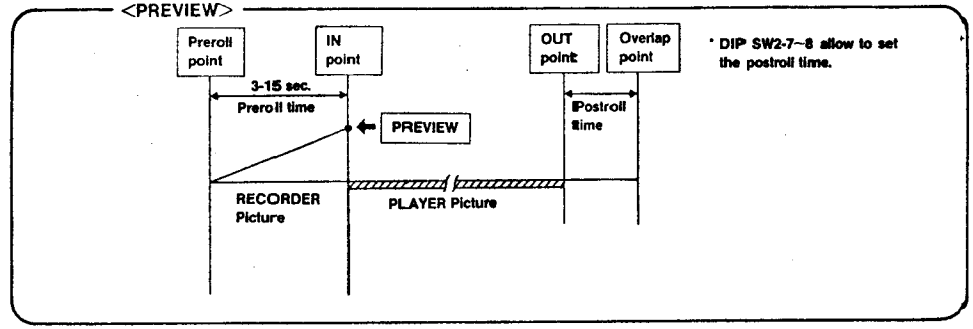
Checking Edit Data

This unit allows the checking of data which has already been entered.

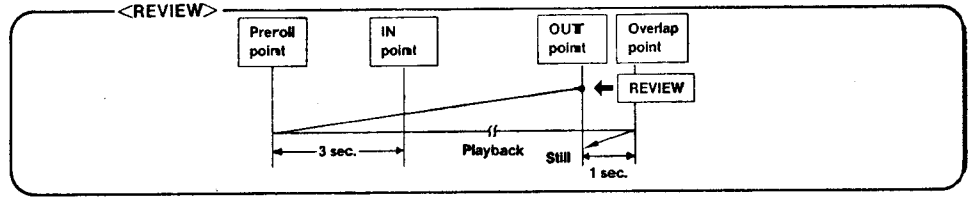
PREVIEW and REVIEW Functions

These functions make it possible to check if the editing data has been entered correctly.
The PREVIEW key enables the rehearsal of the editing process before actual recording by monitoring. The REVIEW key make it possible to play back the finished editing.

- **To preview the event data shown on the display, press the PREVIEW key. (Refer to page 25.)**



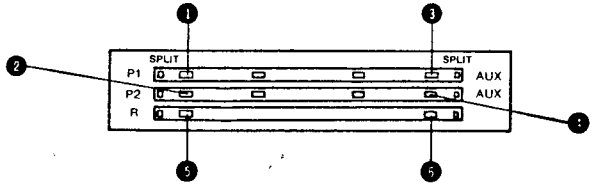
- **To review the event data shown on the display, press the REVIEW key. (Refer to page 27.)**



Checking the entered edit points with the edit lamps

You can make sure all the edit points necessary for the edit have been entered with the edit point lamps. Note that these lamps will light up as explained below depending on the procedure followed.

BASIC EDITING WITH ONE CUT



❶ When the P1 VTR is the source, this lamp will light up after the edit IN point has been entered on this VTR.

❷ When the P2 VTR is the source, this lamp will light up after the edit IN point has been entered on this VTR.

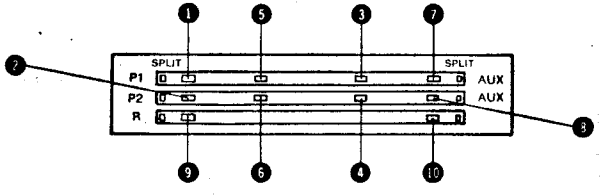
❸ When the P1 VTR is the source, this lamp will light up after the edit OUT point has been entered on this VTR.

❹ When the P2 VTR is the source, this lamp will light up after the edit OUT point has been entered on this VTR.

❺ This lamp will light up after the edit IN point has been entered on the recorder VTR side.

❻ This lamp will light up after the edit OUT point has been entered on the recorder VTR side.

A/B ROLL EDITING



❶ If the A roll is on the P1 VTR, this lamp will light up after the edit IN point is on the A roll.

❷ If the A roll is on the P2 VTR, this lamp will light up after the edit IN point is entered on the A roll.

❸ If the B roll is on the P1 VTR, this lamp will light up after the edit IN point is entered on the B roll.

❹ If the B roll is on the P2 VTR, this lamp will light up after the edit IN point is entered on the B roll.

❺ If the A roll is on the P1 VTR, this lamp will light up after the edit OUT point is entered on the A roll.

❻ If the A roll is on the P2 VTR, this lamp will light up after the edit OUT point is entered on the A roll.

❼ If the B roll is on the P1 VTR, this lamp will light up after the edit OUT point is entered on the B roll.

❽ If the B roll is on the P2 VTR, this lamp will light up after the edit OUT point is entered on the B roll.

❾ This lamp will light up after the edit IN point is entered on the recorder VTR side.

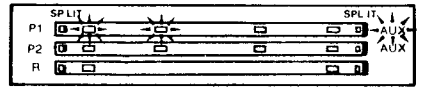
❿ This lamp will light up after the edit OUT point is entered on the recorder VTR side.

EDITING WITH THE AUXILIARY EQUIPMENT

•These lamps function as explained in the previous page.

❶ If the auxiliary equipment is used, this lamp will light up and the P1 or P2 lamp on the left side will function as the edit lamps of the auxiliary equipment.
The upper AUX lamp lights up when normal editing is performed.
Refer to the following notes when performing A/B roll editing.

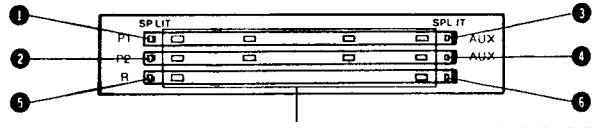
Notes
If the edit points are entered on the auxiliary equipment (the A roll is on the AUX) during A/B roll editing, the upper (P1) AUX lamp will light up (see figure below).



If the B roll is on the P1 VTR, the AUX lamp will shift to the lower side (see figure below).

•If the B roll is on the P2 VTR, the upper AUX lamp will remain lit.
•If the B roll is on the AUX, the lower AUX lamp will light up in case the A roll is on the P1 VTR, and the upper AUX lamp will light up in case the B roll is on the P2 VTR.
•Refer to page 36.

AUDIO SPLIT EDITING



•The lamps in this mode function in the similar way as in other editing modes.

❶ If the P1 VTR audio IN point is entered the lamp will light up.

❷ If the P2 VTR audio IN point is entered the lamp will light up.

❸ If the P1 VTR audio OUT point is entered the lamp will light up.

❹ If the P2 VTR audio OUT point is entered the lamp will light up.

❺ This lamp will light up after the audio IN point has been entered on the recorder VTR side.

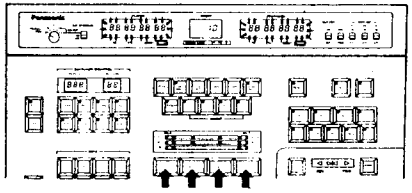
❻ This lamp will light up after the audio OUT point has been entered on the recorder VTR side.

•Refer to page 37.

Checking Edit Point Data

Once the entry of edit points has finished, both displays for the RECORDER and PLAYER will show the positions of the tapes in the VTRs.
You can check each edit point by pressing the following keys: IN, A OUT, B IN and OUT.

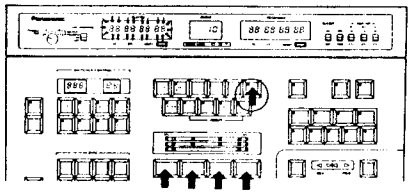
- **Checking the PLAYER and RECORDER Edit Points**
  The edit points will be shown on the displays for the PLAYERs and RECORDER.



IN key ..... To check the IN points of the PLAYER and RECORDER.
In the A/B Roll editing mode, to check the IN point of the A Roll.
A OUT key..... To check the OUT point of the A Roll in the A/B Roll editing mode.
B IN key ..... To check the IN point of the B Roll in the A/B Roll editing mode.
OUT key ..... To check the OUT points of the PLAYER and RECORDER.
In the A/B Roll editing mode, to check the OUT point of the B Roll.

- **Checking the Edit Points in the Audio Split Entry Mode**

The edit points will be shown on the display for the PLAYER.



Press the AUDIO SPLIT key to set the unit to the AUDIO SPLIT entry mode. The corresponding lamp will light up.

If the key is pressed again, this mode will be cancelled and the lamp will go out.

IN key ..... To check the AUDIO IN point.
A OUT or B IN key ..... To check the OUT point of the A Roll or the IN point of the B Roll in the A/B Roll editing mode.
OUT key ..... To check the OUT point.

Checking the Time Duration of an Edit

Press the DUR key ..... The time duration will be shown on the PLAYER and RECORDER displays.

- In the A/B Roll editing mode, the display will switch depending on the setting of the VTR Selection Switch.

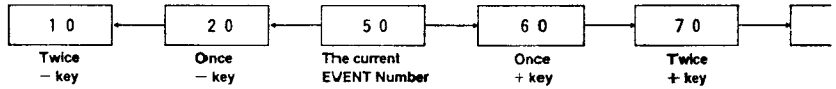
VTR selection switch setting	PLAYER Display	RECORDER Display
R key (RECORDER)	No display	The time duration for the recorder is displayed.
P1, P2 or AUX key (A ROLL VTR)	The time duration of roll A is displayed.	The time duration for the recorder is displayed.
P1, P2 or AUX key (B ROLL VTR)	The time duration of roll B is displayed.	The time duration for the recorder is displayed.

Checking the Edit Data of Several Cuts

- **Follow the steps below when using the PLUS (+) or MINUS (−) key.**

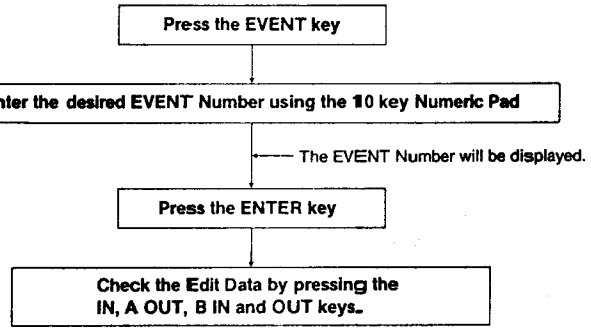
❶ **Press the PLUS or MINUS key together with the EVENT key.**

❷ **The event number will increase by one on the display each time the PLUS key is pressed.**
The event number will decrease by one each time the MINUS key is pressed.



The event numbers which have not been entered will not be displayed (in the example above, 30 and 40 have not been entered).

❸ **Check the edit data with the IN, A OUT, B IN, OUT keys.**
•Follow the steps shown below when using the numeric pad.


Press the EVENT key
Enter the desired EVENT Number using the 10 key Numeric Pad
The EVENT Number will be displayed.
Press the ENTER key
Check the Edit Data by pressing the IN, A OUT, B IN and OUT keys.

Checking the Range of events to be Edited Automatically

The unit allows you to check the range of the events that will be edited automatically.
The event numbers will be displayed when the −, IN and OUT keys are kept depressed.
Press the − key → **The first event number will be displayed on the Player display.**
The last event number will be displayed on the Recorder display.

Changing Edit Data

Edit point adjustment using the + or − key

Enter the EVENT Number to be changed

↓

Select the PLAYER or RECORDER

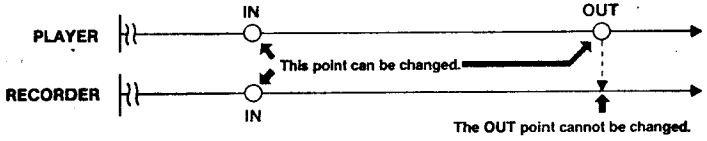
↓

Press the + or − key together with any necessary key IN, A OUT, B IN and OUT keys and make the necessary number adjustment.

- The number will change by one frame each time the +/− keys are pressed.

- **It is recommended to delete edit process data and re-enter it when it is necessary to change large portions of this data.**

Note: The record point calculated automatically internally can not be adjusted using the − and + keys.
The edit OUT point of the RECORDER which has automatically been entered after the entry of IN/OUT points of the PLAYER and the IN point of the RECORDER cannot be changed.



If the IN and OUT point of the RECORDER is entered at the primary stage and then changed at the OUT point of the RECORDER, the OUT point data of the PLAYER will change automatically but the IN point data of the RECORDER will not be changed.

Changing the edit point using the 10 key Numeric Pad

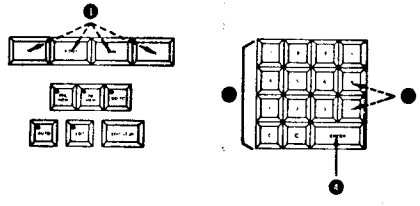
For adjustment with the +/− key

❶ Select the edit point to be changed by pressing the IN, A OUT, B IN and OUT keys after selecting the event number and the PLAYER or RECORDER.

❷ Press the + or − key.

❸ Enter the increased or decreased number to be corrected using the 10 key Numeric Pad.

❹ Press the ENTER key.



For inputting new data

❶ Select the edit point to be changed by pressing the IN, A OUT, B IN and OUT key after selecting the event number and the PLAYER or RECORDER.

❷ Enter the correct data using the 10 key numeric pad.

❸ Press the ENTER key.

Changing the KEY effect data etc.

Enter the new data that is required.

Note
If the Edit data is changed with Automatic continuity editing, the edit data list must be modified. Refer to page 64.

Deleting Edit Data

Edit data deletion

- **To delete the edit points in an event, etc.**

Enter the EVENT Number to be deleted

↓

Select the VTR.

↓

Select the Edit Point to be deleted by pressing the IN, A OUT, B IN and OUT keys (TRAN, PATTERN key, etc.)

↓

Press the C (CLEAR) key and the ENTER key together

- **To delete all the data entered in an event**

Enter the EVENT Number to be deleted

↓

Press the EVENT key

↓

Press the C (CLEAR) key and the ENTER key together

- **To delete the edit points of all the events**

Press the EVENT key

↓

Enter "9999" using the 10 key Numeric Pad

↓

Press the AUTO key and the ENTER key together

- **To cancel the range of automatic continuity editing**

Press the ~ key

↓

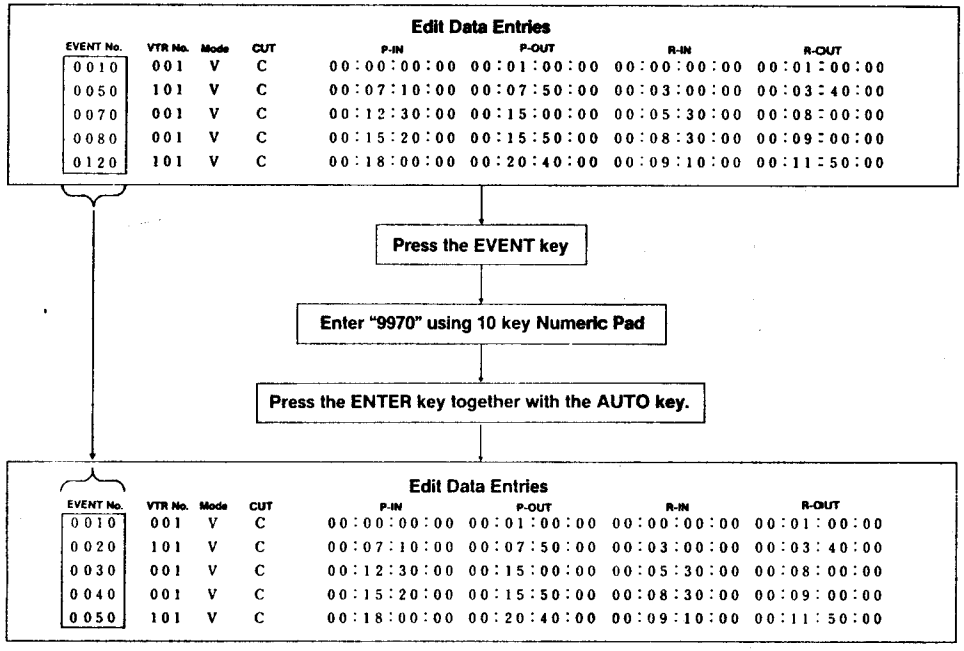
Press the ENTER key while holding down the C key

Note
Enter the new data with the multi edit data list to modify the edit data list, refer to page 64.

EVENT Number Order Modifying

It is possible to line up the event number entered at random.

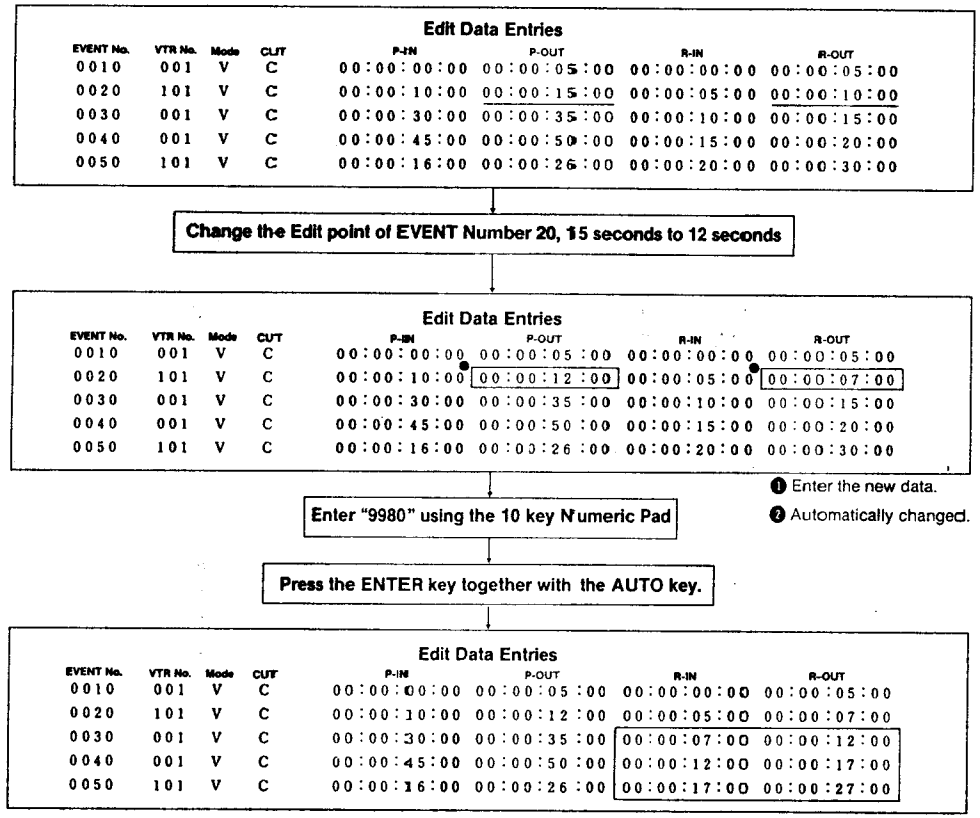
<Example 1>



To Modify Edit Data

This unit can reset and line up the edit point data.

<Example 1>



SAVE/LOAD Edit Data — with Personal Computer

SAVE Edit Data

•Connect the DATA IN/OUT connector to the RS-232C connector of the external equipment, e.g. personal computer. (However, if the personal computer is used, it is necessary to use a special communication software or the MS-DOS operating system.)

Operating Procedure

Example:
Personal Computer: IBM PC/AT
Operating System: MS-DOS (Ver 3.20)

1. Set the communication protocol on the personal computer.
   •baud rate : 9600 BPS
   •data length : 8 DATA BIT
   •parity : NON PARITY
   •stop bit length : 2 STOP BIT

•Enter as shown below.

A>MODE COM1:9600,N,8,2,P ↵

↵ : Return key

2. Set the personal computer to the data receive status.

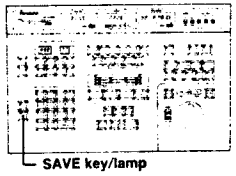
•Enter as shown below.

A>COPY AUX ___/A ↵

Enter the file name.
eg) DATA1.DAT
EDTDATA.DAT

3. Start sending the data on the editing controller.

•Press the SAVE key.
The Save lamp will light up.



SAVE key/lamp

4. Communication ended

•The Save lamp will go off.
•After the data is saved on the disk (or hard disk) on the personal computer, the prompt below will appear on the screen.

A>

<Notes>
•The data is output in the ASCII format.
•The event numbers are displayed from the first event in three columns: "001", "002", "003", etc.
•When the SAVE key is pressed again while the SAVE lamp is lit, the lamp will go off and the output is stopped. However, the personal computer will remain in the receive status.
•Unnecessary characters may be inserted at the beginning of the data communication depending on the type of personal computer being used. The EDL (Edit Decision List) of the AG-A800 begins with the indication "001" of EVENT No. Delete the characters, if any, before this indication.
•If the communication protocol has been wrongly set or the communication cable is not properly connected, the input can be rejected through the keyboard of the personal computer. In this case, set it again following the procedures suitable for the type of personal computer being used.
•Once the communication protocol has been set, it does not have to be set again unless the personal computer is initialized or a communication software is used.
•Refer to the specifications on the back cover for information on the computers that can be connected to this unit.
•Note that the operating procedures differ depending on the operating system or the personal computer being used.

MS-DOS is a trademark of Microsoft Corporation, U.S.A.

LOAD Edit Data

•Connect the DATA IN/OUT connector to the RS-232C connector of the external equipment, eg personal computer. (However, if the personal computer is used, it is necessary to use a special communication software or the MS-DOS operating system.)

Operating Procedure

Example:
Personal Computer: IBM PC/AT
Operating System: MS-DOS (Ver 3.20)

1. Set the communication protocol on the personal computer.
   •baud rate : 9600 BPS
   •data length : 8 DATA BIT
   •parity : NON PARITY
   •stop bit length : 2 STOP BIT

•Enter as shown below.

A>MODE COM1:9600,N,8,2,P ↵

2. Type the file name that will be input to the personal computer. Type as shown on the right but do not press the Enter (or Return) key.

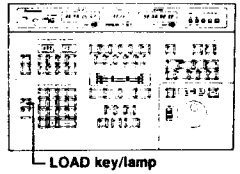
•Type as shown below.

A>COPY _____/B AUX

Type the file name already entered when the edit data is output. An error will occur if the file name typed does not exist.

3. Set the editing controller to the data receive status.

•Press the LOAD key.
The LOAD lamp will light up.



LOAD key/lamp

4. Start sending the data on the personal computer.

•Press the Return key.

A>COPY _____/B AUX ↵

5. Communication ended.

•The prompt below will appear on the screen of the personal computer.

A>

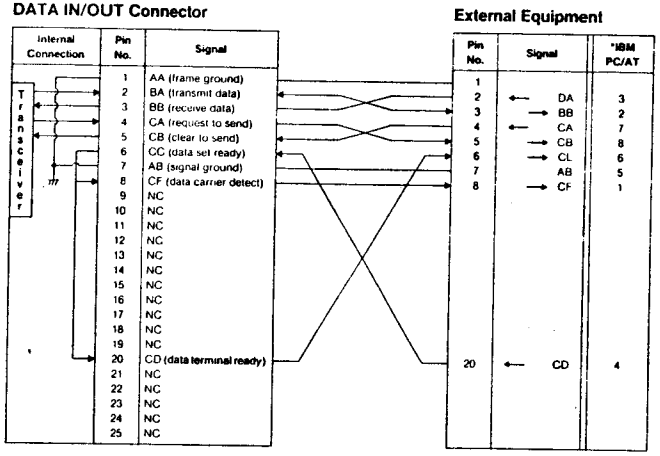
•The LOAD lamp will go off.

<Note>
•The event numbers for the editing data are "0001", "0002", "0003", etc.
To use a multiple of ten as an event number, eg "0010", "0020", "0030", etc., modify the event number. (See page 63.)

CPU Signal When Data is Input/Output

The connection of the CPU signal when data is input/output is as shown below.

AG-A800 Side
DATA IN/OUT Connector



External Equipment

The input and output voltages on the AG-A800 are as follows:

Output voltages	OH	+12V
	OL	−12V
Rated input voltages	IH	+8~+12V
	IL	−8~−12V

* The pin numbers are those for the IBM PC/AT.

•The connections of the signal may differ depending on the external equipment in use.

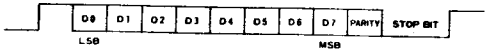
EDL Format

The format of the EDL (Edit Decision List) for the AG-A800 is as shown below.

```
001  001  ASSM  C        01:01:40:12 01:01:50:03 00:00:00:00 00:00:09:16   Normal editing
SPLIT:    VIDEO DELAY=  00:00:01:05                                       Note: audio split
002  002  AA    C        01:02:39:22 01:02:47:03 00:00:08:11 00:00:15:17
002  002  V     C        01:02:41:02 01:02:47:03 00:00:09:16 00:00:15:17   Normal editing (audio split is produced)
003  001  AA/V  C        01:02:01:20 01:02:24:00 00:00:15:17 00:00:37:22
003  002  AA/V  D   050  01:03:03:12 01:03:36:16 00:00:37:22 00:01:11:01   A/B roll editing
004  001  AA/V  C        01:00:21:17 01:00:36:13 00:01:11:01 00:01:25:22
004  003  V     DSK 000  00:00:00:00 00:00:08:15 00:01:13:05 00:01:21:20   Normal editing (the DSK effect is produced)
005  BL   AA/V  C        00:00:00:00 00:00:00:00 00:01:25:22 00:01:25:22
005  002  AA/V  D   060  01:04:16:18 01:04:48:11 00:01:25:22 00:01:57:15
005  001  AA/V  W005 080 01:09:12:13 01:09:49:23 00:01:57:15 00:02:35:00   A/B roll editing (the fade IN/OUT effect is produced)
005  BL   AA/V  D   080  00:00:00:00 00:00:03:05 00:02:31:20 00:02:35:00
                        Player IN   Player OUT  Recorder IN Recorder OUT
```

Transition time: In frame units.
Effect modes: C (cut), D (dissolve), W005 (wipe, pattern number: 005) DSK (down stream keyer foreground).
Editing modes: A (A1), V (V), B (A1+V), A2 (A2), A2/V (A2+V), AA (A1+A2), AA/V (A1+A2+V) Insert, ASSM (assemble).
VTR reel number: BL (black video picture), 001 (player 1), 002 (player 2), 003 (DSK foreground), 004 (white video picture), AX (AUX).
Event No.

Serial Communication Format



•The following protocol can be set with the DIP switches.
1. 7, 8 DATA BITS
2. EVEN/ODD/NON PARITY BIT
3. 1, 2 STOP BIT
4. 110, 300, 600, 1200, 2400, 4800, 9600, 19200 BPS. (See 70 page.)

Modifying the Tape Speed with the SEARCH DIAL

When an optional Interface Board is used to control the VTR, the speed of the tape set with the Search Dial will be modified as shown below according to the VTR connected to this unit.

JOG MODE

Models	Reverse Direction	−1 frame	Still	1 frame	Forward Direction
AU-650B	Speed variable from 1/32~1 times normal playback speed.	○	○	○	Speed variable from 1/32~2 times normal playback speed.
AG-7500/7510	Speed variable from 1/25~2 times normal playback speed.	○	○	○	Speed variable from 1/25~2 times normal playback speed.
AG-6500	Speed variable from 1/25~2 times normal playback speed.	○	○	○	Speed variable from 1/25~2 times normal playback speed.

SHTL MODE

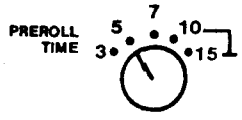
Models	Reverse Direction	Still	Forward Direction
AU-650B	Speed variable from 1/16~32 times normal playback speed.	○	Speed variable from 1/16~32 times normal playback speed.
AG-7500/7510	Speed variable from 1/25~10 times normal playback speed.	○	Speed variable from 1/25~10 times normal playback speed.
AG-6500	Speed variable from 1/25~10 times normal playback speed.	○	Speed variable from 1/25~10 times normal playback speed.

○=Possible function in this unit.
"1" is the parameter value which stands for normal playback speed and in terms of which variable speed values are expressed.

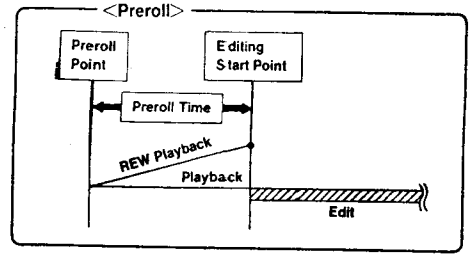
Preroll Time Setting

The 3-, 5-, 7-, 10- and 15-second preroll times can be set with the Preroll Time Selection Switch on the control panel. The preroll time should be prolonged when synchronization is not satisfactory. If synchronization is not satisfactory after the preroll time has been prolonged, turn the CAPSTAN OVERRIDE Selector Switch off. However, Synchronization can be performed.

Set the Preroll Time Selection Switch to the desired position.



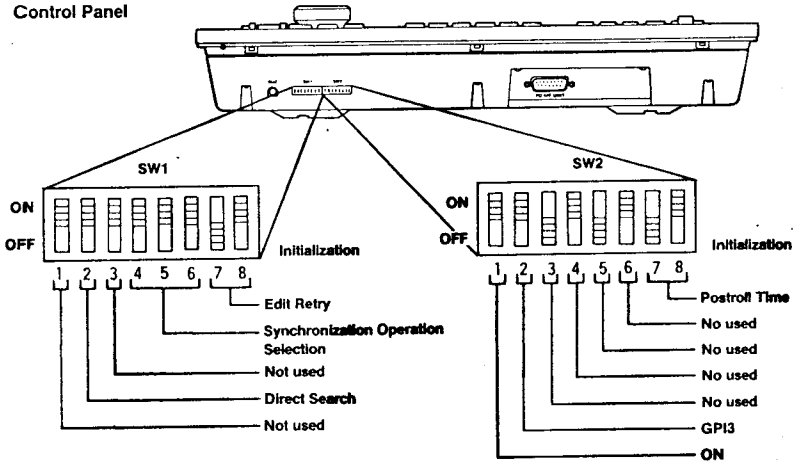
The preroll time setting of the switch above is for 5 seconds.



•If synchronization is not performed, you can finely adjust the start timing with the Edit Time Switch of the 34-pin Interface Board for accurate editing. Refer to page 78.

DIP Switch Settings

Control Panel



SW1-1: **Not used**

SW1-2: **Direct Search**
This switch directly sets the unit to the search mode when the Search dial is used in modes other than recording. It is not necessary to press the SRCH key.
ON → The unit is directly set to the Search mode.
OFF → No direct Search mode. SRCH key must be pressed.

SW1-4:
SW1-5:
SW1-6: Synchronization Operation Selection
Used to select the synchronization method for the respective VTRs.
ON→ Performed with CAP OVERRIDE
OFF→ Performed in shuttle mode
SW1-4: Synchronization on RECORDER VTR
SW1-5: Synchronization on PLAYER2 VTR
SW1-6: Synchronization on PLAYER1 VTR

Note:
Leave switches in the "OFF" position if the CAP OVERRIDE terminal is not connected.

Synchronization may not be possible in the shuttle mode. In this case, set the CAP OVERRIDE switch on the operation panel to the "OFF" position.

SW1-7:
SW1-8: **Edit Retry**
These two switches set the number of times the retry function will be performed when a preview, edit or automatic edit has not been executed correctly.

Retry	0*	2	–	–
SW1-7	0	0	1	1
SW1-8	0	1	0	1

"0" → "OFF", "1" → "ON"

*** The Retry mode is not possible as both switches are set to OFF.**

Note:
In the Retry mode, the preroll times are prolonged as follows:
The 3- and 5-second preroll times are increased by two (2) seconds; the 7-second preroll time by three (3) seconds and the 10- and 15- second preroll times by five (5) seconds from second times.

SW2-1: ON
SW2-2: Set the timing of GPI3 pulse signal switches from OPEN to CLOSE or vice versa.
ON—Switches the audio edit timing.
OFF—Switches the Key operation timing.

SW2-7
SW2-8 Sets the post-roll time as follows:

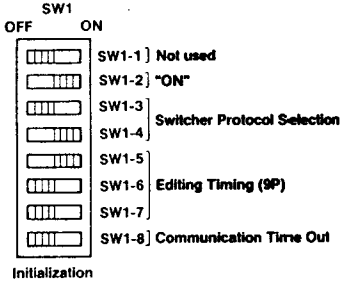
Post-roll time (in seconds)	0.5	1	2	3
SW2-7	0	0	1	1
SW2-8	0	1	0	1

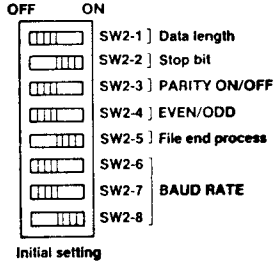
0 → "OFF", 1 → "ON"

Note
The post-roll time is one second during preview regardless of the switch settings.

I/F Unit

The DIP Switches are located inside the I/F unit.
Consult your dealer for information on DIP SW settings.





SW1-1: **Not used**
SW1-2: **ON**
SW1-3:
SW1-4: These switches determine the appropriate protocols for optional switchers AG-SW800.

Switchers	—	AG-SW800	—	—
SW1-3	0	0	1	1
SW1-4	0	1	0	1

"0" → "OFF", "1" → "ON"

SW1-5: **Set the edit command timing.**
SW1-6:
SW1-7: Avail able only when 9-pin serial interface board is connected.

Timing	–1	–2	–3	–4	–5	–6	–7	–8
SW1-5	0	0	0	0	1	1	1	1
SW1-6	0	0	1	1	0	0	1	1
SW1-7	0	1	0	1	0	1	0	1

"0" → "OFF", "1" → "ON" **INITIAL VALUE**
MII VTR: –5 Frame

Reference
BVU-800 (SONY): –1 frame
BVU-950 (SONY): –6 frames
BVW-75 (SONY): –3 frames

•The BVU-800, BVU-950 and BVW-75 are made by SONY Corporation.

SW1-8: Sets the communication time-out when communicate with personal computer.
ON: 3 sec.
OFF: The communication time-out is not executed.

SW2: Switches the RS-232C on the Host CPU

Switch		Content	1 (ON)	0 (OFF)
SW2	–1	Communication data length	7-bit	8 bit
	–2	Stop bit length	2 STOP bit	1 STOP bit
	–3	—	PARITY ON	PARITY OFF
	–4	—	EVEN PARITY	ODD PARITY
	–5	—	CR, LF,^Z output	^Z output
	–6	See figure below		
	–7			
	–8			

BAUD RATE		110	300	600	1200	2400	4800	9600	19200
SW2	–6	1	1	1	1	0	0	0	0
	–7	1	1	0	0	1	1	0	0
	–8	1	0	1	0	1	0	1	0

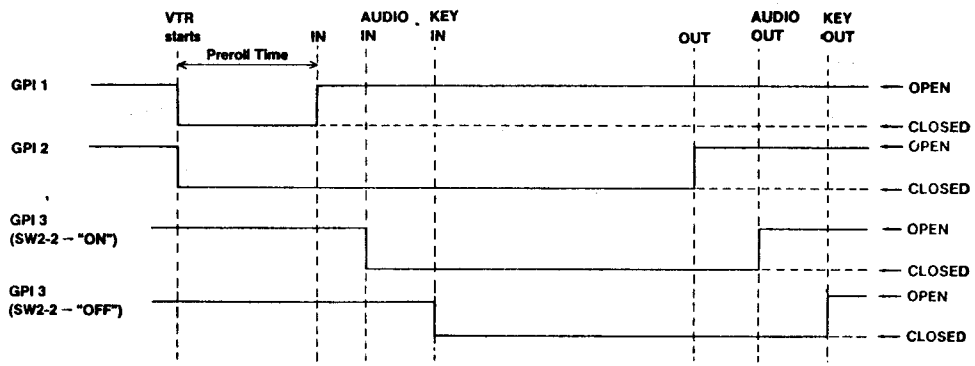
0 → "OFF", 1 → "ON"

Pulse signal from the AUX Control Connector

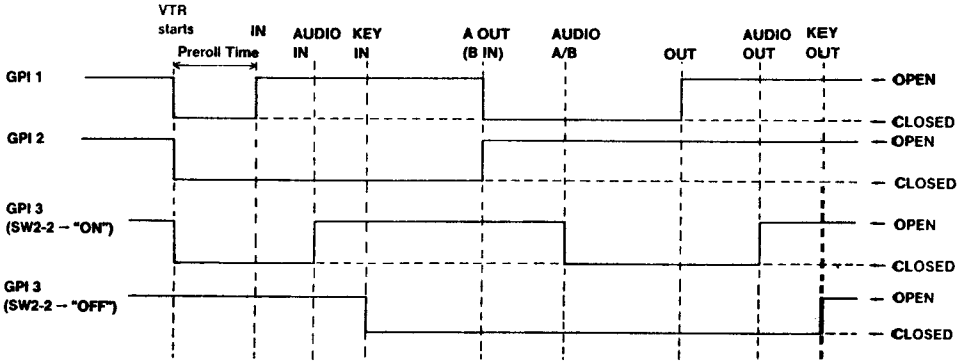
The unit controls the start of the external unit and the switcher, when they are connected to the AUX CONTROL Connector, by sending out pulse signals.
Three pulse signals are output from the 15 Pin AUX CONTROL Connector as follows:

GPI 1: The Pulse signal is outputted from Pins 1 and 2.
GPI 2: The Pulse signal is outputted from Pins 3 and 4.
GPI 3: The Pulse signal is outputted from Pins 5 and 6.

The pulse signals will vary as shown from the start to the end of the edit.



• A/B Roll Editing Mode



•When the DIP SW2-2 on the control panel is set to ON, the signal from the GPI3 is synchronized with the audio edit points. When set to OFF, it is synchronized with the Key IN/OUT points and then outputed.
•The GPI pulse signal is outputed one frame before the time set.

Error Messages

The buzzer on the unit will sound three times to indicate that an operation error has occurred and the following error messages will be shown on the display on the RECORDER Side after pressing the TOTAL key.

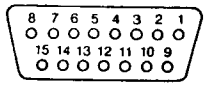
ERROR CODE TABLE

Code Number	NO ERROR
00-00	There has been no error since the power was turned "ON". The operation has been completed correctly.
Code Number	**PLAYER CONTROL AND AUX ERRORS**
01-00	No commands are acceptable except "STOP" during the editing operation.
01-01	"RESET" is not acceptable except in the CTL mode.
01-02	PLAYER 1 has not been connected. Or CONTROL Switch of the VTR is in the "LOCAL" position. Or VTR is in the EJECT mode.
01-03	PLAYER 2 has not been connected. Or CONTROL Switch of the VTR is in the "LOCAL" position. Or VTR is in the EJECT mode.
01-04	This unit does not work in the following case. (EXAMPLE) The execution of playback can not be performed when selecting the external signal.
Code Number	**RECORDER CONTROL ERRORS**
02-00	No commands are acceptable except "STOP" during the editing operation.
02-01	"RESET" is not acceptable except in the CTL mode.
02-02	The RECORDER has not been connected. The CONTROL Switch is set to "LOCAL". The VTR is in the EJECT mode.
02-03	Cannot be operated because the switcher AG-SW800 is not connected.
Code Number	**EDIT ENTRY ERRORS**
03-00	The entry of the edit points is not completed.
03-01	The multi-event memory is full.
03-02	Mode can not be changed because the VTRs are in the EDIT mode.
03-03	Neither checking nor changing is possible during the auto editing operation.
03-04	The PLAYER has not been connected. Input the edit data using the 10 key Numeric Pad only.
03-05	The recorder has not been connected. Input the edit data using the 10 key Numeric Pad only.
03-06	This is the 4th or 6th edit point. Delete one of the previous points and then enter it.
03-07	The audio-split has been entered twice.
03-08	Not possible during the editing operation.
03-09	No edit entry.
03-10	This unit does not work in the following case. (EXAMPLE) When correcting the edit points, no data is input follow the pressing of the + or – key.
03-12	The event number must be between "0000" and "9899".
03-13	Rejected as the current mode is LOAD/SAVE.
03-14	The edit IN point is larger than the edit OUT point.
03-15	The input data is not correct in the Time unit.
03-16	The event number being displayed indicates maximum or minimum of all events entered.

DISPLAY	EDITING ERROR
05-00	The key input is not operative as an edit is in progress.
05-01	The key input is not operative as the edit is not complete.
05-02	The key input is not operative as the edit points have not been entered.
05-03	The current and previous events cannot be reviewed as they have not been edited.
05-04	The edit cannot be made as the player VTR side has not been connected.
05-05	The edit cannot be made as the recorder VTR side has not been connected.
05-06	The servo on the player VTR side is disturbed during the edit.
05-07	The servo on the recorder VTR side is disturbed during the edit.
05-08	The servo can not be locked on the VTR.
05-09	The VTR cannot be controlled during the edit.
05-10	Colour framing error
05-11	Synchronization has not been performed.
05-13	The edit is not possible as the current mode is LOAD/SAVE.
DISPLAY	**LOAD/SAVE ERROR**
06-00	LOAD/SAVE cannot be executed as an edit is in progress.
06-01	The operation is not possible as the current mode is SAVE.
06-02	The operation is not possible as the current mode is LOAD.
06-03	Communication error in loading (data will not be transmitted for more than 3 seconds).
06-04	The event number to be loaded is wrong.
06-05	The number of the VTR for the loading operation is wrong.
06-06	The preset data for the loading operation is wrong.
06-07	The transition data for the loading operation is wrong.
06-08	The IN point on the player VTR side for the loading operation is wrong.
06-09	The OUT point on the player VTR side for the loading operation is wrong.
06-10	The IN point on the recorder VTR side for the loading operation is wrong.
06-11	The OUT point on the recorder VTR side for the loading operation is wrong.
06-12	The multi-event memory cannot be entered as the edit data has not been completely recorded.
06-13	Cannot be entered as the multi-event memory is full.
06-14	The host can not be operated for more than 3 seconds in the SAVE mode.

DISPLAY	A/B ROLL EDITING ERROR
07-00	The wrong VTR has been selected.
07-01	Audio split recording cannot be performed.
07-02	The IN point on the A roll is larger than the OUT point on the A roll.
07-03	The recorder has not been connected.
07-04	The P-VTR with the A roll has not been connected.
07-05	The P-VTR with the B roll has not been connected.
07-06	The edit data has not been recorded completely.
07-08	The switcher AG-SW800 has not been connected.
07-09	The control switch on the switcher AG-SW800 has been set to "LOCAL".
07-12	The mode is not A/B roll editing.
07-14	TAKE cannot be performed during the preroll.
08-02	Cannot be entered as the edit is now in progress.
08-03	The IN point on the A roll is equal to or larger than the OUT point on the A roll.
08-04	The IN point on the B roll is equal to or larger than the OUT point on the B roll.
08-05	No change or recording can be done during review.
09-00	The duration on the A roll is equal to or larger than the duration of the roll on the recorder VTR side.
09-01	The duration on the B roll is equal to or larger than the duration of the roll on the recorder VTR side.
09-02	The servo on the A roll is disturbed.
09-03	The servo on the B roll is disturbed.
09-08	The VTR on the A roll side cannot be controlled.
09-09	The VTR on the B roll side cannot be controlled.
10-00	Unspecified error

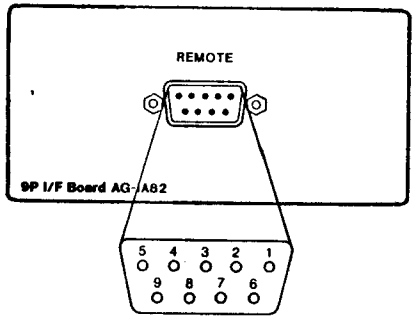
- **AUX CONTROL Connector (15P)**



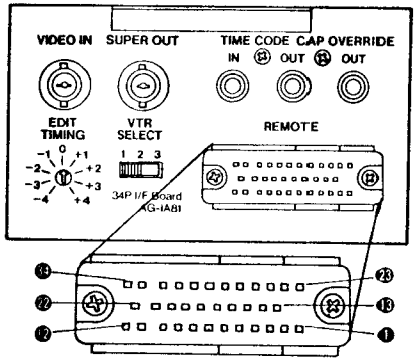
Pin No.	Signal
1	GPI 1
2	GPI 1
3	GPI 2
4	GPI 2
5	GPI 3
6	GPI 3
7~15	—

Interface Board Connector

9P Interface Board



34P Interface Board



9P REMOTE Connector

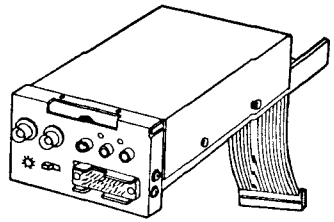
Pin No.	Signal
1	GND
2	RECEIVE A
3	TRANSMIT B
4	TRANSMIT COMMON
5	SPARE
6	RECEIVE COMMON
7	RECEIVE B
8	TRANSMIT A
9	GND

34P REMOTE Connector

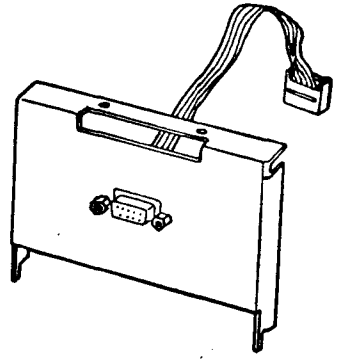
Pin No.	Signal	Pin No.	Signal
1	REC SWITCH	18	CONTROL PULSE OUT
2	PLAY SWITCH	19	REMOTE 19
3	FF SWITCH	20	
4	REW SWITCH	21	
5	STOP SWITCH	22	INSERT CH1
6		23	REC HOLD
7	PAUSE SWITCH	24	PLAY HOLD
8		25	FF HOLD
9	CUT IN SWITCH	26	REW HOLD
10	NOT SOURCE PLAY	27	INSERT CH2
11	SERVO LOCK	28	
12	GND	29	PAUSE HOLD
13		30	REMOTE 30
14	REVERSE COUNT	31	CUT IN HOLD
15	CUT OUT SWITCH	32	INSERT VIDEO
16	EDIT SWITCH	33	REMOTE 33
17	REVERSE	34	+12V

Optional Interface Boards

AG-IA81
34P Interface Board



AG-IA82
9P Interface Board



The VTRs listed in the table below can be connected to this unit if their corresponding Interface Boards are installed in the unit slot.

* Please consult qualified service personnel to install the interface board.

Interface Board	MODEL NO.	VTR		
9 Pin Interface Board	AG-IA82	• AU-620 • AU-650B	• AU-630	• AU-640
34 Pin Interface Board	AG-IA81	• AG-7500 • AG-6500 • NV-9600	• AG-7510 • NV-9240	

■ **THIS APPARATUS MUST BE EARTHED.**

To ensure safe operation the three-core lead supplied (not for U.K. model) must be connected only into a standard three-pin power point which is effectively earthed through the normal household wiring.

Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth. Wrongly wired extension cords are a major cause of fatalities.

The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe. For your safety, if in any doubt about the effective earthing of the power point, consult a qualified electrician.

■ **DO NOT REMOVE PANEL COVER BY UNSCREWING.**

To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

CAUTION:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, REFER INSTALLATION OF THE INTERFACE BOARD TO QUALIFIED SERVICE PERSONNEL.

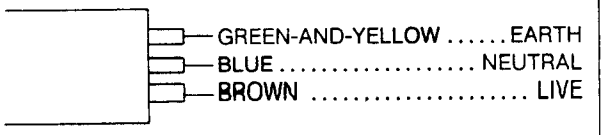
CAUTION:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

■ **AC POWER CORD CONNECTION (AG-A800-B only)**

The wires in the mains lead for this apparatus are coloured in accordance with the following code.

Important



Mains Lead

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured GREEN or GREEN-AND-YELLOW.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured red.

WARNING: TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.